Qualwave

Broadband Microwave and Millimeter-Wave Components Supplier

2023

About Qualwave Inc

Qualwave Inc is the top designer and manufacturer of microwave and millimeter wave products. We supply both active and passive components in a wide frequency range from DC to 110GHz all over the world. We provide a series of standard products to meet the needs of most customers. Meanwhile we customize products according to special requirements.

Our company is equipped with 67GHz vector network analyzers, signal sources, spectrum analyzers, power meters, oscilloscopes, welding platforms, resistance and voltage withstand test instruments, high and low temperature test systems and other research and development, production and testing equipments. Our quality management system has been successfully registered for GB/T19001-2016/ISO9001:2015. Like the name, quality is one of the key success factors. Our products are designed and manufactured with the latest tools and the best quality materials. Our engineers are keeping quality in mind through designing, manufacturing and testing. We are proud that many clients rated five stars in their feedback for product quality.

Our team is comprised of professional microwave and millimeter wave engineers and specialized support staff. We take customer's needs as the first priority, as the success of our customers is also our success. We optimized design and manufacture processes by adding more flexibility, which helps to shorten the lead time. Our management and service are customer oriented, ensuring to response to customer as soon as possible.

Products

Amplifiers	Antennas	Attenuators	Baluns	Bias Tees
Cable Assemblies	Calibration Kits	Circulators/Isolators	Coaxial Adapters	Connectors
Couplers	DC Blocks	Detectors	Equalizers	Filters/ Multiplexers
Frequency Dividers/ Multipliers	Impedance Matching Pads	Frequency Sources	Limiters	Mixers
Phase Shifters	Probes	Dividers/Combiners	Rotary Joints	RF Surge Protectors
Switches	Terminations	Tools	Waveguide To Coax Adapters	

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Please use your browser to scan the QR code and download the latest product catalog.

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Amplifiers

Qualwave supplies broadband, low noise and high power amplifiers in a broad range from 4kHz to 260GHz.

Power Amplifiers

Power amplifier, connected in the end of transmitter, is used to amplifier the power of modulated signal in HF, which will then be transmitted to the space by antennas, and ensure the receiver could get proper signal level and the signal does not interfere with the communication of adjacent channels.

Features: Broadband, High Power; **Applications:** Wireless, Transmitter, Radar, Laboratory Test.

How To Order:

QPAV-W-X-Y-Z

- W — Modules: Blank, Systems: S
- X — Start Frequency (MHz)
- Y — Stop Frequency (MHz)
- Z — P1dB (dBm) (Note: if it is Psat, add "S" at the end)
- Gain (dB)

Examples: To order a power amplifier module, 0.03~1GHz, gain 45dB, Psat 30dBm, specify QPA-30-1000-45-30S.

Power Amplifier Modules

The sizes in the following table do not include connectors. PA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QPA-0.1-500-43-40	0.0001~0.5	-	40	43	±2.5	24	2	200*101*27.8
QPA-0.1-3000-25-26	0.0001~3	-	26	25	±4	28	2	118*73*35
QPA-1-60-23-23	0.001~0.06	-	23	23	-	5	1.8	32*30*12
QPA-2-30-58-60S	0.002~0.03	60	-	58	±2	50	2	240*125*45
QPA-5-500-46-37S	0.005~0.5	37	-	46	±2	24~28	2	116*49*25
QPA-10-2500-30-37S	0.01~2.5	37	-	30	±3.5	32	2.4	120*68.5*25
QPA-10-2500-40-40S	0.01~2.5	40	-	40	±3.5	32	2.4	120*68.5*25
QPA-10-3000-30-29	0.01~3	-	29	30	±2	24	2	75.5*48*15
QPA-10-3000-30-29-1	0.01~3	-	29	30	±2	24	2	75*48*15
QPA-20-500-40-50S	0.02~0.5	50	-	40	±2.5	32	2	198*88*25
QPA-20-1000-36-18	0.02~1	-	18	36	±2.5	5	2	40*30*15
QPA-20-6000-40-36	0.02~6	38	36	40	±4	15	2.5	135*100*25
QPA-25-530-48.5-51.8S	0.025~0.53	51.8	-	48.5	±1.5	28	1.5	190.5*86.4*27.2
QPA-30-80-16-23	0.03~0.08	23	-	16	±1	12	1.8	64.3*34.3*20
QPA-30-500-32-37S	0.03~0.5	37	-	32	±1.5	12	2	80*50*20
QPA-30-1000-16-23	0.03~1	23	-	16	±1	12	1.8	64.3*34.3*20
QPA-30-1000-45-30S	0.03~1	30	-	40~45	±2.5	28	2	61*45*15
QPA-50-1000-26-35	0.05~1	-	35	26	±1	28	-	65*35*20
QPA-100-500-30-40S	0.1~0.5	40	-	30	±1	28	2	100*50*20
QPA-100-4000-60-20	0.1~4	-	20	60	±3	5	2	80*60*20
QPA-200-300-42-40S	0.2~0.3	40	-	42	±1	28	2	98*58*20
QPA-300-8000-12-27	0.3~8	-	27	12	±2	12	2	50*30*15
QPA-400-6000-30-25	0.4~6	-	25	30	±2	12	2	30*25*10
QPA-400-8000-40-22	0.4~8	-	22	40	±1.5	12	1.8	50*30*15
QPA-410-950-45-47S	0.41~0.95	47	-	45	±2	28	2	200*89*25
QPA-500-1000-49-52S	0.5~1	52	-	49	±1	28	1.5	190.5*86.36*27.178
QPA-500-2000-30-40S	0.5~2	40	-	30	±2	28	2	130*50*20
QPA-500-2500-46-43	0.5~2.5	-	43	46	±2.5	28	2	160*100*25
QPA-500-3000-47-46S	0.5~3	46	-	47	±3	32	2.4	198*88*25
QPA-500-6000-30-37	0.5~6	-	37	30	±3.5	50	2	80*60*20
QPA-600-12000-30-20	0.6~12	-	20	30	±1	12	1.8	50*30*15
QPA-617-894-42-48S	0.617~0.894	48	-	42	±2	32	2	198*88*35.7
QPA-700-4200-43-40S	0.7~4.2	40	-	43	±3	30	2	162*72*26
QPA-703-748-34.25-33	0.703~0.748	-	33	34.25	±0.75	12	2	98*58*20
QPA-750-6000-35-35	0.75~6	39	35	35	±3.5	50	2	61*45*15
QPA-791-821-45-40	0.791~0.821	-	40	45	±0.5	30	2	98*58*20
QPA-800-2000-40-39	0.8~2	-	39	40	±2	32	2	162*72*26
QPA-800-4200-47-46.5S	0.8~4.2	46.5	-	47	±2.5	32	2	198*88*25
QPA-925-960-42-48S	0.925~0.960	48	-	42	±2	32	2	198*88*35.7
QPA-950-2150-25-25	0.95~2.15	-	25	25	±1.5	5	2	48.5*29*10
QPA-1000-4000-43-40S	1~4	40	-	43	±2.5	32	2	158.5*68.5*25
QPA-1000-18000-35-30	1~18	-	30	35	±2	12	2	61*45*15
QPA-1000-26500-28-24	1~26.5	-	24	28	±1.5	12	2	50*30*15

The sizes in the following table do not include connectors. PA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QPA-1100-1700-48-47S	1.1~1.7	47	-	48	±1.5	32	2	135*75*24.5
QPA-1500-1700-48-47S	1.5~1.7	47	-	48	±1.5	32	2	158.5*68.5*25
QPA-1500-1700-48-50S	1.5~1.7	50	-	48	±1.5	32	2	158.5*68.5*25
QPA-1500-5000-30-34	1.5~5	-	34	30	±5	32	2.4	162*72*26
QPA-1710-1785-35-33	1.71~1.785	-	33	35	±0.75	12	2	98*58*20
QPA-1800-2200-46-45S	1.8~2.2	45	-	46	±1	30	1.5	120*120*20
QPA-1805-1880-35-33	1.805~1.88	-	33	35	±0.75	28	2	98*58*20
QPA-1805-1880-45-40	1.805~1.88	-	40	45	±0.75	30	2	98*58*20
QPA-1805-1880-42-48S	1.805~1.88	48	-	42	±2	32	2	198*88*35.7
QPA-1920-1960-35-40	1.92~1.96	-	40	35	±0.5	220	2	98*58*20
QPA-1920-1980-34-33	1.92~1.98	-	33	34	±1	12	2	98*58*20
QPA-2000-3000-33-33	2~3	-	33	33	±3	30~32	2	120*75*18
QPA-2000-3500-46-42S	2~3.5	42	-	46	-	28	2	180*70*20
QPA-2000-6000-35-33S	2~6	33	-	35	±4	28	2	70*50*20
QPA-2000-6000-40-39	2~6	-	39	40	±2.5	28	2	80*60*20
QPA-2000-6000-40-39S	2~6	39	-	40	±2.5	28	2	-
QPA-2000-18000-40-40S	2~18	40	-	40	±3	32	2	120*80*15
QPA-2000-18000-40-47S	2~18	47	-	40	±6	28	2	230*180*35
QPA-2300-2700-30-42S	2.3~2.7	42	-	30	3	28	-	180*60*20
QPA-2110-2170-42-48S	2.11~2.17	48	-	42	±2	32	2	198*88*35.7
QPA-2300-2700-30-42S	2.3~2.7	42	-	30	3	28	-	180*60*20
QPA-2300-4200-53-47.8S	2.3~4.2	47.8	-	53	±2.5	50	2	200*89*25
QPA-2500-2570-34-33	2.5~2.57	-	33	34	±1	12	2	98*58*20
QPA-2500-2700-50-47.8S	2.5~2.7	47.8	-	50	±1	32	2	200*89*25
QPA-2570-2620-45-40	2.57~2.62	-	40	45	±0.75	30	2	98*58*20
QPA-2620-2690-45-40	2.62~2.69	-	40	45	±0.75	30	2	98*58*20
QPA-2620-2690-42-48S	2.62~2.69	48	-	42	±2	32	2	198*88*35.7
QPA-2700-2900-42-50S	2.7~2.9	50	-	42	±1	32	1.8	135*69
QPA-3300-3800-33.5-33	3.3~3.8	-	33	33.5	±1.5	28	2	98*58*20
QPA-3300-3800-42-48S	3.3~3.8	48	-	42	±2	32	2	198*88*35.7
QPA-3500-5000-47-47S	3.5~5	47	-	47	-	32	-	220*110*20
QPA-3500-5000-50-50S	3.5~5	50	-	50	-	32	-	260*180*20
QPA-4000-5000-42-41.7S	4~5	41.7	-	42	±2	24	2	165*50*20
QPA-4000-6000-40-47S	4~6	47	-	40	-	32	2	200*80*20
QPA-4400-4950-46-40S	4.4~4.95	40	-	46	±2	32	2	158.5*68.5*25
QPA-4400-5000-35-33	4.4~5	-	33	35	±2	12	2	80*55*20
QPA-5000-6000-32-32	5~6	-	32	32	±1	28	2	98*58*20
QPA-5100-5900-33-40S	5.1~5.9	40	-	33	±1.5	24	2	162*72*26
QPA-5250-5850-46-40S	5.25~5.85	40	-	46	±2	32	2	158.5*68.5*25
QPA-5600-5800-18-47	5.6~5.8	50	47	18~25	1	30	2	198*98*22.8
QPA-6000-18000-25-26S	6~18	26	-	25	±1	12	2	61*45*15
QPA-6000-18000-33-26S	6~18	26	-	33	±1	12	2	60*60*15
QPA-6000-18000-35-33S	6~18	33	-	35	±3	12	2	60*60*15
QPA-6000-18000-35-35S	6~18	35	-	35	±2.5	24~28	2	61*45*15
QPA-6000-18000-40-40S	6~18	40	-	40	±3	24~28	2	61*45*15
QPA-6000-18000-45-47S	6~18	47	-	45	-	28	2	240*200*40
QPA-8000-12000-45-46S	8~12	46	-	45	±2	28	2	100*80*20
QPA-8000-18000-30-30S	8~18	30	-	30	±3	8	2	61*45*15
QPA-8500-10500-25-43S	8.5~10.5	43	-	25	±0.5	28	2	100*80*20
QPA-12000-18000-25-30S	12~18	30	-	25	±2	5	2.5	61*45*15
QPA-12000-18000-38-27	12~18	-	27	38	±1.5	12	2	50*30*15
QPA-14400-15350-33-39	14.4~15.35	-	39	33	±0.5	12	2	150*120*20
QPA-15000-18000-30-33	15~18	-	33	30	±0.5	8	2	61*45*15
QPA-18000-22000-35-13	18~22	-	13	35	±1	5	2	50*30*15
QPA-18000-22000-40-33	18~22	-	33	40	±1	7.5	2	61*45*15
QPA-18000-26000-30-30S	18~26	30	-	30	±3.5	8	2.5	61*45*15
QPA-18000-26500-15-23	18~26.5	-	23	15	±1	9	1.8	50*30*15
QPA-18000-26500-30-30	18~26.5	-	30	30	-	8	2	61*45*15
QPA-18000-26500-40-40S	18~26.5	40	-	40	±2	8	2	150*120*20
QPA-18000-26500-45-40S	18~26.5	40	-	45	±3	28/-5	2	165*140*61
QPA-18000-40000-20-20	18~40	-	20	20	-	6	2	50*30*15
QPA-18000-40000-30-20	18~40	-	20	30	±2	12	1.8	30*20*12

The sizes in the following table do not include connectors. PA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QPA-18000-40000-30-23S	18~40	23	-	30	±2.5	12	2.5	61*45*15
QPA-18000-40000-30-27	18~40	-	27	30	±2.5	12	2	150*120*15
QPA-18000-40000-30-30	18~40	-	30	30	±2.5	6	2	61*45*15
QPA-19000-21000-40-30	19~21	-	30	40	±1	8	2	61*45*15
QPA-20000-32000-22-21	20~32	-	21	22	±2.5	5	2	50*30*15
QPA-20000-32000-25-21	20~32	-	21	25	±1	8	1.5	50*30*15
QPA-20000-40000-33-29S	20~40	29	-	33	±2.5	5	2	61*45*15
QPA-22000-24000-25-30S	22~24	30	-	25	±1	6	1.8	50*30*15
QPA-23000-25000-15-27S	23~25	27	-	15	±0.5	12	1.5	61*45*15
QPA-24000-26000-30-30	24~26	-	30	30	-	8	2	50*30*15
QPA-24000-26000-30-32	24~26	-	32	30	-	8	2	80*60*20
QPA-25000-28000-18-25	25~28	-	25	18	-	6	2	50*30*15
QPA-25500-27500-20-30	25.5~27.5	-	30	20	±1.5	12	2	60*60*15
QPA-26000-40000-30-30S	26~40	30	-	30	±4	8	2, 5	61*45*15
QPA-26500-40000-18-23	26.5~40	-	23	18	±1.5	6	1.8	60*40*15
QPA-26500-40000-25-30S	26.5~40	30	-	25	±5	12	2	50*50*15
QPA-26500-40000-27-27	26.5~40	-	27	27	±2	6.5	2	61*45*15
QPA-26500-40000-30-26S	26.5~40	26	-	30	±2	6	2	50*30*15
QPA-27000-31000-30-23	27~31	-	23	30	±1.5	12	2	50*30*15
QPA-27500-31200-25-25	27.5~31.2	-	25	25	±1	12	2	50*30*15
QPA-29000-31000-35-30	29~31	-	30	35	±1	6	2	61*45*15
QPA-29500-31500-20-30	29.5~31.5	-	30	20	±1	12	2	60*60*15
QPA-32000-36000-35-35S	32~36	35	-	35	±2.5	24~28	2	61*45*15
QPA-36000-50000-20-30	36~50	-	30	20	±1.5	5	2	120*100*28.6
QPA-37000-40000-45-34-F	37~40	-	34	45	-	6	2	80*60*20
QPA-37000-43000-10-15	37~43	-	15	10	±1.5	6	2	50*30*15
QPA-38000-42000-25-30	38~42	-	30	25	±1.5	6	2	80*60*20
QPA-39000-40000-40-33	39~40	-	33	40	-	6	2	61*45*15
QPA-40000-50000-20-20	40~50	-	20	20	-	6	2	50*30*28.6
QPA-40000-50000-45-29S	40~50	29	-	45	±2	5~6	2	150*120*30
QPA-40000-53000-40-18S	40~53	18	-	40	±2	5	2	50*30*15
QPA-40000-60000-35-20S	40~60	20	-	35	±5	7	2	45*30*40
QPA-40000-60000-25-26S	40~60	26	-	25	-	25	2	45*30*40
QPA-40000-60000-40-20S	40~60	20	-	40	±2.5	15	2	50*30*15
QPA-47000-52000-20-30S	47~52	30	-	20	±1.5	15	2	61*45*15
QPA-47000-52000-25-30S	47~52	30	-	25	±1.5	15	2	61*45*15
QPA-47000-52000-30-30S	47~52	30	-	30	±2	15	2	61*45*28.6
QPA-50000-75000-35-19S	50~75	19	-	35	-	7	2.5	50*40*24
QPA-55000-90000-20-19S	55~90	19	-	20	±1.5	5	2	35*30*22
QPA-60000-67000-30-27	60~67	30	27	30	±2	4.5	2	80*60*20
QPA-60000-90000-27-20S	60~90	20	-	27	-	7	2	75*40*22
QPA-61000-65000-18-26S	61~65	26	23	18	±1	5	2	100*80*19
QPA-61000-65000-20-20S	61~65	20	17	20	±1.5	5	2	30*19*19
QPA-75000-110000-25-15S	75~110	15	-	25	-	7	1.8	52*30*24
QPA-110000-150000-18-15S	110~150	15	-	18	-	7	3	35*30*22
QPA-210000-230000-12-20S	210~230	20	-	12	-	5	2	73*70*22
QPA-210000-230000-18-14S	215~230	14	-	18	-	7	3	35*28*22
QPA-215000-230000-16-10.5S	215~230	10.5	-	16	1.5	7	2.5	73*70*22

Power Amplifier Systems

The sizes in the following table do not include connectors, rack mount brackets, handles.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage (V AC)	VSWR	Size* (mm)
QPAS-20-500-40-50S	0.02~0.5	50	-	40	±2.5	220	2	483*400*133
QPAS-20-2700-50-44S	0.02~2.7	44	-	50	±2.5	220	2.2	460*491*88
QPAS-30-1000-40-47S	0.03~1	47	-	40	±2.5	220	2	483*400*133
QPAS-108-400-55-54S	0.108~0.4	54	-	55	±1.5	220	2	483*440*133
QPAS-200-2000-40-47S	0.2~2	47	-	40	±2.5	220	2	483*440*133
QPAS-500-2700-51-50	0.5~2.7	-	50	51	±2.5	220	3	602.5*482.6*310.3
QPAS-500-3000-50-50S	0.5~3	50	45	50	±2.5	220	2	483*400*133
QPAS-600-6000-43-43S	0.6~6	43	-	43	±4	220	2	526.7*483*147

The sizes in the following table do not include connectors, rack mount brackets, handles.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage (V AC)	VSWR	Size* (mm)
QPAS-700-2000-40-40S	0.7~2	40	_	40	±2	220	2	483*400*133
QPAS-700-2500-55-52S	0.7~2.5	52	-	55	±2.5	220	2	483*420.8*133
QPAS-700-2700-50-50S	0.7~2.7	50	-	50	±2	220	2	544.5*426*128
QPAS-1000-26500-20-18	1~26.5	-	18	20	±2.5	220	2.6	166*106.4*56.4
QPAS-2000-6000-40-46S	2~6	46	-	40	±3	220	2	481.8*500*88.5
QPAS-2000-18000-40-38S	2~18	38	-	40	±2.5	220	2	166*106.4*56.4
QPAS-2000-18000-40-40S	2~18	40	-	40	±3	220	2	430*500*44.3
QPAS-3300-4900-55-55S	3.3~4.9	55	-	55	±1.5	220	2	481.8*500*88.5
QPAS-5000-6000-55-63S	5~6	63	-	55	±1	220	2	482.6*559*132.5
QPAS-6000-18000-45-45S	6~18	45	-	45	±2.5	220	2	481.8*338*44.3
QPAS-6000-18000-68-54S	6~18	54	-	68	±5.3	220	2	701.5*434*265
QPAS-8000-12000-40-47S	8~12	47	-	40	±2	220	2	481.8*500*88.5
QPAS-8000-18000-40-45S	8~18	45	-	40	±2	220	2	538*430*44.3
QPAS-23000-25000-40-40S	23~25	40	-	40	±2	220	1.8	274*238*50
QPAS-23000-25000-40-43S	23~25	43	-	40	±2	220	1.8	481.8*350*44.3
QPAS-24000-43000-30-30S	24~43	30	-	30	±3	220	2	481.8*500*44.3
QPAS-47000-51000-55-43S	47~51	43	-	55	4	220	1.6	328.5*226*180.5

Low Noise Amplifiers

LNA features very low noise and is normally used as pre-amplifier in HF or IF of radio receiver and amplifier circuit in high-sensitivity electronic detection equipment. In weak signal environment, LNA could lower the noise of amplifier itself and increase SNR (Signal to Noise Ratio).

Features: Broadband, Low Noise; **Applications:** Wireless, Receiver, Radar, Laboratory Test.

How To Order:

QLAV-W-X-Y-Z

- Modules: Blank, Systems: S
- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Gain (dB)
- Z: Noise Figure * 10 (dB)

Examples: To order a low noise amplifier module, 1~18GHz, gain 45dB, noise figure 3dB, specify QLA-1000-18000-45-30.

Low Noise Amplifier Modules

The sizes in the following table do not include connectors. LNA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QLA-9K-3000-43-30	9K~3	3	16	43	±1.5	12	1.8	38.1*21.59*9.5
QLA-0.01-15000-12-60	0.00001~15	6(typ.)	10	12	±2.5	12	2	40*35*12
QLA-0.09-2000-42-30	0.00009~2	3(typ.)	15(typ.)	42(typ.)	-	12	2(typ.)	40*32*12
QLA-0.1-500-24-30	0.0001~0.5	3	5	24	±0.5	15	1.5	50*30*15
QLA-0.1-500-30-30	0.0001~0.5	3	5	30	±0.5	5	1.5	50*30*15
QLA-0.5-1000-23-12	0.0005~1	1.2(typ.)	23(typ.)	23(typ.)	-	5	1.8(typ.)	32*30*12
QLA-1-400-50-20	0.001~0.4	2	20	50	±0.5	15	2	69.7*26.9*17.5
QLA-1-12000-30-55	0.001~12	5.5(typ.)	15	30	±2.5	12	2.5	40*35*12
QLA-1-26500-17-55	0.001~26.5	5.5(typ.)	10	17	±1.0	12	2.5	40*35*12
QLA-1.6-30-13.5-42	1.6~30	4.2	26	13.5	0.25	15	1.2	88*80*36
QLA-5-1000-46-15	0.005~1	1.5(typ.)	20(typ.)	46(typ.)	-	5	2(typ.)	44*30*15
QLA-10-60-15-50	0.01~0.06	5	23	15	±1.0	12	1.5	50*30*15
QLA-10-60-16-50	0.01~0.06	5	23	16	±1.5	5	-	48.5*29
QLA-10-2500-30-40	0.01~2.5	4(typ.)	10	30	±1.0	12	2	16.2*12.2*7.4
QLA-10-18000-25-50	0.01~18	5	10	25	±1.0	12	2.2	27.2*17.8*7.4
QLA-20-3000-30-35	0.02~3	3.5	15	30	±2.5	15	2	50*30*20
QLA-20-6000-32-15	0.02~6	1.5(typ.)	12	32	±1.5	5	2.5	40*35*12
QLA-20-8000-20-30	0.02~8	3(typ.)	12	20	±2.0	12	2(typ.)	60*45*15
QLA-25-1000-50-13	0.025~1	1.3	14	50	-	5~20	2.5	60*30*20
QLA-30-1000-15-20	0.03~1	2	18	15	±3	5.5	2	50*30*20
QLA-30-1000-50-13	0.03~1	1.3	15	50	±2.5	12	1.5	50*30*15
QLA-30-3000-40-30	0.03~3	3	12	40	±2	15	2	50*30*20
QLA-30-6000-25-50	0.03~6	5	10	25	±3	15	2	50*30*15
QLA-30-18000-15-25	0.03~18	2.5(typ.)	10	15	±1.0	12	1.8	16.2*12.2*7.4
QLA-50-90-15-32	0.05~0.09	3.2	10	15	±0.2	15	1.5	50*30*15
QLA-50-3000-17-15	0.05~3	1.5	15	17	±1.5	5	2	18.8*19.1*11.7
QLA-50-6000-25-40	0.05~6	4	22	25	±3	12	2	50*30*15
QLA-100-6000-16-10	0.1~6	1	21	16	±8	5	2	30*30*15
QLA-100-6000-25-25	0.1~6	2.5	15	25	±2	12	1.5	50*30*15
QLA-100-12000-25-25	0.1~12	2.5	15	25	±2	12	1.5	50*30*15
QLA-100-15000-45-22	0.1~15	2.2	5	45	±2.5	12	1.5	50*30*15
QLA-100-20000-25-40	0.1~20	4	20	25	±1.5	12	3	30*20*12
QLA-100-26500-30-30	0.1~26.5	3	20	30	±2.5	12	2	40*35*12
QLA-100-30000-18-55	0.1~30	5.5	15	18	±2.5	12	2.5	40*35*12
QLA-100-50000-28-50	0.1~50	5(typ.)	10	28	±3.0(max.)	12	3	21.8*17.8*7.4
QLA-200-2000-30-30	0.2~2	3	10	30	±2	5	2	50*30*20
QLA-200-6000-42-13	0.2~6	1.3	15	42	±2	12	2	50*30*15
QLA-200-10000-45-50	0.2~10	5	23	45	±2.0(max.)	12	2.2	35*40*12
QLA-300-40000-40-55	0.3~40	5.5(typ.)	14	40	±2.5	12	2.5	40*35*12
QLA-400-2000-25-20	0.4~2	2	20	25	±1.5	9	2.5	18.8*19.1*11.7
QLA-400-8000-40-25	0.4~8	2.5	14	40	±1.5	12	2	50*30*15
QLA-500-8000-20-16	0.5~8	1.6(typ.)	18(typ.)	20(typ.)	±1.0	6	3.5	18.8*19.1*11.7
QLA-500-18000-10-30	0.5~18	3(typ.)	12	10	±1.5	15	2	21.8*17.8*7.4
QLA-500-18000-14-30	0.5~18	3(typ.)	17	14	±0.75	15	2	16.2*17.8*7.4
QLA-500-18000-16-50	0.5~18	5	18	16	±1.5(max.)	12	2.2	38*20*8
QLA-500-18000-40-30	0.5~18	3	10	40	±1.5	12	2.5	40*35*12

The sizes in the following table do not include connectors. LNA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QLA-500-18000-40-35	0.5~18	3.5	12	40	±2	5	2	50*30*15
QLA-500-40000-43-50	0.5~40	5	14	43	±2.5	12	2	40*35*12
QLA-600-4200-20-10	0.6~4.2	1(typ.)	21(typ.)	20(typ.)	±2(typ.)	5	2(typ.)	30*30*15
QLA-600-4200-30-08	0.6~4.2	0.8	21	30	±2.5	5	2	40*30*15
QLA-600-4200-35-10	0.6~4.2	1	21	35	±2	5	2	40*30*15
QLA-600-4200-55-11	0.6~4.2	1.1	21	55	±3	5	2	56*30*15
QLA-700-1100-20-25	0.7 ~ 1.1	2.5	13	20	±1	12	1.5	50*30*15
QLA-700-1100-25-25	0.7 ~ 1.1	2.5	13	25	±1.5	5	-	48.5*29
QLA-800-18000-25-35	0.8 ~ 18	3.5	13	25	±2.5	12	2	50*30*15
QLA-950-2150-20-20	0.95 ~ 2.15	2	15	20	±1.5	5	2	48.5*29*10
QLA-1000-6000-15-20	1 ~ 6	2	12	15	±4.5	5	2	50*30*20
QLA-1000-12000-25-50	1~12	5(typ.)	-	25	±1.5(max.)	12	2	39.1*18.8*9.27
QLA-1000-12000-28-30	1~12	3	15	28	±1.0	12	2	16.2*17.8*7.4
QLA-1000-18000-30-40	1 ~ 18	4	10	30	±1.5	12	1.5	50*30*15
QLA-1000-18000-40-32	1~18	3.2	8	40	±2	12	1.8	50*30*15
QLA-1000-18000-42-25	1~18	2.5	10	42	±1.5	9	2	21.8*17.8*7.4
QLA-1000-18000-45-30	1~18	3	10	45	±2	5, 12	1.5	50*30*15
QLA-1000-18000-47-25	1~18	2.5	10	50	±1.5	9	2	21.8*17.8*7.4
QLA-1000-18000-47-32	1~18	3.2	12	47	-	12	1.8	50*30*15
QLA-1000-18000-50-30	1~18	3	20	50	±2.5	12	2	50*30*15
QLA-1000-18000-55-22	1~18	2.2	10	55	±1.5	12	2.5	40*35*12
QLA-1000-20000-25-35	1~20	3.5	21	25	±2.5	12	2	50*30*15
QLA-1000-20000-40-40	1~20	4	16	40	±2	12	1.5	50*30*15
QLA-1000-40000-30-80	1~40	8	10	30	±3.0	12	2.5	21.8*17.8*7.4
QLA-2000-6000-30-15	2~6	1.5	2	30	±1.0	5	2	27.4*25.4*10
QLA-2000-6000-39-45	2~6	4.5	23	39	±0.8	10	2	27.508*27.762*9.703
QLA-2000-8000-20-40	2~8	4	8	20	±1.5	5	1.6	50*30*15
QLA-2000-10000-30-40	2~10	4	15	30	±1.0	12	2	40.208*27.762*9.703
QLA-2000-18000-12-32	2~18	3.2	13	12	±1.5	12	2	16.2*17.8*7.9
QLA-2000-18000-18-30	2~18	3	10	18	±1.5	12	1.5	50*30*15
QLA-2000-18000-18-40	2~18	4	19	18	±1.0	12	2	25*20*10
QLA-2000-18000-21-40	2~18	4	23	21	±1.0	12	2	34.5*16.8*7.6
QLA-2000-18000-28-30	2~18	3	10	28	±1.5	12	1.5	50*30*15
QLA-2000-18000-30-45	2~18	4.5	10	30	±2.0	12	2	16.2*17.8*7.4
QLA-2000-18000-34-30	2~18	3	22	34	±1.5	12	2.2	29.5*19.05*9.27
QLA-2000-26500-25-40	2~26.5	4	8	25	±2	12	1.8	50*30*15
QLA-2000-26500-48-50	2~26.5	5	10	48	±4.5	9	2.5	50*30*15
QLA-3000-12000-24-30	3~12	3	21	24	±1.5	12	1.5	50*30*15
QLA-3000-15000-15-30	3~15	3	8	15	±1.0	5	1.5	50*30*15
QLA-4000-8000-22-25	4~8	2.5	14	22	±1.0	12	2	16.2*17.8*7.4
QLA-4000-8000-40-11	4~8	1.1	10	40	±1.5	12	2	17.8*16.2*7.4
QLA-4000-12000-14-30	4~12	3	15	14	±2.0	12	2	27.2*17.8*7.4
QLA-4000-12000-30-15	4~12	1.5	10	30	±2.0	12	2	17.8*16.2*7.4
QLA-5000-10000-30-23	5~10	2.3	10	30	±1.2	5	1.5	50*30*15
QLA-5400-5900-35-08	5.4~5.9	0.8	10	35	±0.3	5	1.4	50*30*15
QLA-6000-18000-20-28	6~18	2.8	13	20	±1.2	12	2	27.6*27.8*9.9
QLA-6000-18000-25-50	6~18	5	10	25	±3	5	2	50*30*15
QLA-6000-18000-50-30	6~18	3	15	50	±1.5	12	2	50*30*15
QLA-8000-12000-15-40	8~12	4	13	15	±0.5	5	1.5	50*30*15
QLA-8000-12000-32-11	8~12	1.1	10	32	±1.0	12	2	17.8*16.2*7.4
QLA-8000-18000-20-40	8~18	4	8	20	±1.5	5	1.6	50*30*15
QLA-8000-26500-15-35	8~26.5	3.5	8	15	±1.5	5	1.5	50*30*15
QLA-8000-26500-40-65	8~26.5	6.5	18	40	±2	12	2	50*30*15
QLA-9000-10000-25-15	9~10	1.5	20	25	±0.5	9	1.8	50*30*15
QLA-10700-12750-25-30	10.7~12.75	3	8	25	±0.5	5	1.5	50*30*15
QLA-12000-18000-20-40	12~18	4	15	20	±1.5	12	1.5	50*30*15
QLA-12000-18000-36-18	12~18	1.8	10	36	±1.2	12	2	17.8*16.2*7.4
QLA-12000-40000-30-40	12~40	4	5	30	±2.5	12	2.5	50*30*15
QLA-16000-22000-35-25	16~22	2.5	19	35	±1.5	12	2	50*30*15
QLA-16000-40000-20-35	16~40	3.5	16	20	±3.5	5	2	50*30*15
QLA-17500-20200-20-20	17.5~20.2	2	2	20	±0.5	5	1.5	50*30*15

The sizes in the following table do not include connectors. LNA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QLA-17700-21200-30-80	17.7~21.2	8	10	30	±2	15~24	2	50*30*15
QLA-18000-26500-30-40	18~26.5	4	5	30	±1	12	1.8	50*30*15
QLA-18000-26500-48-25	18~26.5	2.5	10	48	±2.5	12	2.3	17.8*16.2*7.4
QLA-18000-26500-45-32	18~26.5	3.2	10	45	±2	5	1.8	50*30*15
QLA-18000-28000-20-40	18~28	4	8	20	±1.5	5	1.6	50*30*15
QLA-18000-40000-25-50	18~40	5	12	25	±1.5(max.)	12	2.5	16.2*17.8*7.4
QLA-18000-40000-25-50(P10)	18~40	5	10	25	±3	5	2	50*30*15
QLA-18000-40000-25-50(P15)	18~40	5	15	25	±2.5	12	2	50*30*15
QLA-18000-40000-30-50(P20)	18~40	5	20	30	±2.5	12	2.5	50*30*15
QLA-18000-40000-30-35	18~40	3.5	8	30	±2.5	12	2.2	17.8*16.2*7.4
QLA-18000-40000-40-45	18~40	4.5	6	40	±2.5	15	2	50*30*15
QLA-18000-40000-50-45	18~40	4.5	5	50	±3	15	2	50*30*15
QLA-20000-32000-40-25	20~32	2.5	10	40	±2.5	5	2	50*30*15
QLA-23000-25000-35-20	23~25	2	-3	35	±1.5	5	1.8	50*30*15
QLA-23000-40000-34-35	23~40	3.5	10	34	±2.5	12	2	50*30*15
QLA-24000-28000-30-40	24~28	4	10	30	±1	5	2	50*30*15
QLA-24000-30000-30-20	24~30	2	10	30	±1	5	1.5	50*30*15
QLA-25300-27200-50-18	25.3~27.2	2.1	5	49~51	±1	12	1.7	58*40*22.1
QLA-26000-40000-30-28	26~40	2.8	10	30	±2.5	12	2.3	17.8*16.2*7.4
QLA-26000-40000-30-30	26~40	3	-	30	-	15	2.2	40*40*24
QLA-26500-40000-20-30	26.5~40	3	5	20	±1.5	5	1.5	50*30*15
QLA-26500-40000-25-40	26.5~40	4	-	25	±2	5	1.8	40*19.1*19.1
QLA-39000-41000-30-32	39~41	3.2	10	30	±0.5	5	2	50*30*15
QLA-40000-53000-40-50	40~53	5	10	40	±2	5	2	50*30*15
QLA-50000-59000-40-55	50~59	5.5	10	40	±1	8	2	50.2*40*25
QLA-50000-75000-25-30	50~75	3	-	25	-	7	2	35*30*22
QLA-57000-67000-30-50	57~67	5	10	30	-	12	2	50*30*15
QLA-60000-90000-35-40	60~90	4	9	35	-	5	3	40*30*22
QLA-60000-90000-26-43	60~90	4.3	-	26	-	7	2	35*30*22
QLA-75000-110000-20.5-32	75~110	3.2	-	20.5	±2.5	10	2	35*30*24
QLA-75000-110000-38-36	75~110	3.6	-	38	-	10	2.2	35*30*22
QLA-110000-170000-16-40	110~170	4(typ.)	-	16	±3	7	2.2	35*30*22
QLA-140000-200000-15-45	140~200	4.5	-	15	±3	7	2.5	35*30*22
QLA-200000-230000-22-72	200~230	7.2	-	22	±3	8	2.5	35*30*22
QLA-230000-260000-19-85	230~260	8.5	-	19	-	8	3.5	35*30*22

Low Noise Amplifier Systems

The sizes in the following table do not include connectors, rack mount brackets, handles.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage (V AC)	VSWR	Size* (mm)
QLAS-0.01-15000-12-70	0.00001~15	7	15	12	±3	220	2	136*186*52
QLAS-0.03-40000-54-60	0.00003~40	6	10	54	±3	220	1.8	481.80*350*44.3
QLAS-0.1-500-24-30	0.0001~0.5	3	5	24	±0.5	220	1.5	136*186*52
QLAS-0.1-500-30-30	0.0001~0.5	3	5	30	±0.5	220	1.5	136*186*52
QLAS-10-60-15-50	0.01~0.06	5	23	15	±1.0	220	1.5	136*186*52
QLAS-10-60-16-50	0.01~0.06	5	23	16	±1.5	220	-	136*186*52
QLAS-10-8000-40-20	0.01~8	2	18	40	±3	220	2	136*186*52
QLAS-10-18000-50-40	0.01~18	4(0.2~18GHz)	10	50	±3	220	2.5	136*186*52
QLAS-25-1000-50-13	0.025~1	1.3	14	50	-	220	2.5	136*186*52
QLAS-30-1000-50-13	0.03~1	1.3	15	50	±2.5	220	1.5	136*186*52
QLAS-30-6000-25-50	0.03~6	5	10	25	±3	220	2	136*186*52
QLAS-50-90-15-32	0.05~0.09	3.2	10	15	±0.2	220	1.5	136*186*52
QLAS-50-6000-25-40	0.05~6	4	22	25	±3	220	2	136*186*52
QLAS-100-6000-25-25	0.1~6	2.5	15	25	±2	220	1.5	136*186*52
QLAS-100-12000-25-25	0.1~12	2.5	15	25	±2	220	1.5	136*186*52
QLAS-100-15000-45-22	0.1~15	2.2	5	45	±2.5	220	1.5	136*186*52
QLAS-100-18000-35-40	0.1~18	4	10	35	±3	220	2.5	166*106.4*56.4
QLAS-100-26500-30-55	0.1~26.5	5.5	20	30	±3	220	2	136*186*52
QLAS-200-6000-42-13	0.2~6	1.3	15	42	±2	220	2	136*186*52
QLAS-400-8000-40-25	0.4~8	2.5	14	40	±1.5	110	1.8	166*106.4*56.4
QLAS-500-8000-20-25	0.5~8	2.5	20	20	±2	220	2	166*106.4*56.4

The sizes in the following table do not include connectors, rack mount brackets, handles.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage (V AC)	VSWR	Size* (mm)
QLAS-500-18000-40-30	0.5~18	3	10	40	±1.5	220	2.5	136*186*52
QLAS-500-18000-40-35	0.5~18	3.5	12	40	±2	220	2	136*186*52
QLAS-500-18000-45-30	0.5~18	3	10	45	±1.5	220	2.5	136*186*52
QLAS-700-1100-20-25	0.7 ~ 1.1	2.5	13	20	±1	220	1.5	136*186*52
QLAS-700-1100-25-25	0.7 ~ 1.1	2.5	13	25	±1.5	220	-	136*186*52
QLAS-700-8000-30-25	0.7~8	2.5	13	30	±2	220	2	161*135*50
QLAS-800-18000-25-35	0.8 ~ 18	3.5	13	25	±2.5	220	2	136*186*52
QLAS-950-2150-20-20	0.95 ~ 2.15	2	15	20	±1.5	220	2	136*186*52
QLAS-1000-2000-30-20	1 ~ 2	2	15	30	±1.5	220	2	136*186*52
QLAS-1000-5000-25-40	1~5	4	20	25	-	110	1.8	166*106.4*56.4
QLAS-1000-12000-45-30	1 ~ 12	3	10	45	±2	220	1.5	136*186*52
QLAS-1000-18000-30-40	1 ~ 18	4	10	30	±1.5	220	1.5	136*186*52
QLAS-1000-18000-40-30	1~18	3	15	40	±2	220	2	166*106.4*56.4
QLAS-1000-18000-40-32	1~18	3.2	8	40	±2	220	1.8	136*186*52
QLAS-1000-18000-42-25	1~18	2.5	10	45	±1.5	220	2	136*186*52
QLAS-1000-18000-45-30	1~18	3	10	45	±2	220	1.5	136*186*52
QLAS-1000-18000-47-25	1~18	2.5	10	50	±1.5	220	2	136*186*52
QLAS-1000-18000-47-32	1~18	3.2	12	47	-	220	1.8	136*186*52
QLAS-1000-18000-50-30	1~18	3	20	50	±2.5	220	2	136*186*52
QLAS-1000-18000-55-22	1~18	2.2	10	55	±1.5	220	2.5	166*106.4*56.4
QLAS-1000-20000-25-35	1~20	3.5	21	25	±2.5	220	2	136*186*52
QLAS-1000-20000-40-40	1~20	4	16	40	±2	220	1.5	136*186*52
QLAS-1000-40000-40-50	1~40	5	16(Psat)	45	±4.5	220	3	136*186*52
QLAS-2000-8000-20-40	2~8	4	8	20	±1.5	220	1.6	136*186*52
QLAS-2000-18000-18-30	2~18	3	10	18	±1.5	220	1.5	136*186*52
QLAS-2000-18000-28-30	2~18	3	10	28	±1.5	220	1.5	136*186*52
QLAS-2000-26500-25-40	2~26.5	4	8	25	±2	220	1.8	136*186*52
QLAS-3000-12000-24-30	3~12	3	21	24	±1.5	220	1.5	136*186*52
QLAS-2000-26500-48-50	2~26.5	5	10	48	±4.5	220	2.5	136*186*52
QLAS-3000-15000-15-30	3~15	3	8	15	±1.0	220	1.5	136*186*52
QLAS-5400-5900-35-08	5.4~5.9	0.8	10	35	±0.3	220	1.4	136*186*52
QLAS-6000-18000-25-50	6~18	5	10	25	±3	220	2	136*186*52
QLAS-6000-18000-50-30	6~18	3	15	50	±1.5	220	2	166*106.4*56.4
QLAS-6000-40000-45-35	6~40	3.5	10	45	±2.5	220	2	120*90*46.2
QLAS-6000-40000-55-35	6~40	3.5	10	55	±3.5	220	2	166*106.4*56.4
QLAS-8000-12000-15-40	8~12	4	13	15	±0.5	220	1.5	136*186*52
QLAS-8000-18000-20-40	8~18	4	8	20	±1.5	220	1.6	136*186*52
QLAS-8000-26500-15-35	8~26.5	3.5	8	15	±1.5	220	1.5	136*186*52
QLAS-8000-26500-40-65	8~26.5	6.5	18	40	±2	220	2	136*186*52
QLAS-12000-18000-20-40	12~18	4	15	20	±1.5	220	1.5	136*186*52
QLAS-12000-40000-30-40	12~40	4	5	30	±2.5	220	2.5	136*186*52
QLAS-16000-22000-35-25	16~22	2.5	19	35	±1.5	220	2	136*186*52
QLAS-16000-40000-20-35	16~40	3.5	16	20	±2	220	2	136*186*52
QLAS-17500-20200-20-20	17.5~20.2	2	2	20	±0.5	220	1.5	136*186*52
QLAS-17700-21200-30-80	17.7~21.2	8	10	30	±2	220	2	136*186*52
QLAS-18000-26500-30-40	18~26.5	4	5	30	±1	220	1.8	136*186*52
QLAS-18000-26500-45-32	18~26.5	3.2	10	45	±2	220	1.8	136*186*52
QLAS-18000-28000-20-40	18~28	4	8	20	±1.5	220	1.6	136*186*52
QLAS-18000-28000-28-30	18~28	3	5	28	±1.5	220	1.8	136*186*52
QLAS-18000-40000-25-50	18~40	5	10	25	±3	220	2	136*186*52
QLAS-18000-40000-25-50(P15)	18~40	5	15	25	±2.5	220	2	136*186*52
QLAS-18000-40000-30-50(P20)	18~40	5	20	30	±2.5	220	2.5	136*186*52
QLAS-18000-40000-40-35	18~40	3.5	8	40	±2.5	220	2.5	120*90*46.2
QLAS-18000-40000-40-45	18~40	4.5	6	40	±2.5	220	2	136*186*52
QLAS-18000-40000-45-40	18~40	4	10	45	3.5	220	2	166*106.4*56.4
QLAS-18000-40000-50-45	18~40	4.5	5	50	±3	220	2	136*186*52
QLAS-18000-40000-55-40	18~40	4	10	55	±3.5	110~220	2	166*106.4*56.4
QLAS-20000-32000-40-25	20~32	2.5	10	40	±2.5	220	2	136*186*52
QLAS-23000-25000-35-20	23~25	2	-3	35	±1.5	220	1.8	136*186*52
QLAS-23000-40000-34-35	23~40	3.5	10	34	±2.5	220	2	136*186*52
QLAS-25300-27200-50-18	25.3~27.2	1.8	5	50	±1	220	1.5	136*186*52
QLAS-26000-30000-25-50	26~30	5	20 (Psat)	25	-	110	1.8	166*106.4*56.4

The sizes in the following table do not include connectors, rack mount brackets, handles.

Part Number	Frequency (GHz)	Noise Figure (dB)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage (V AC)	VSWR	Size* (mm)
QLAS-26500-40000-20-30	26.5~40	3	5	20	±1.5	220	1.5	136*186*52
QLAS-39000-41000-30-32	39~41	3.2	10	30	±0.5	220	2	136*186*52
QLAS-40000-53000-40-50	40~53	5	10	40	±2	220	2	136*186*52
QLAS-40000-60000-35-70	40~60	7	20	35	±2.5	220	2	214*218*48
QLAS-50000-59000-40-55	50~59	5.5	10	40	±1	220	2	136*186*52
QLAS-57000-67000-30-50	57~67	5	10	30	-	220	2	136*186*52

Antennas

Horn antenna, also called microwave horn antenna, is an antenna that consists of a flaring metal waveguide shaped like a horn to direct radio waves in a beam. Horns are widely used as antennas at UHF and microwave frequencies, above 300 MHz. They are used as feed antennas (called feed horns) for larger antenna structures such as parabolic antennas, as standard calibration antennas to measure the gain of other antennas, and also as directive antennas.

Standard Gain Horn Antennas

The standard gain horn antenna is commonly used as a gain reference antenna for antenna measurement, and the accuracy of its gain calibration value determines the accuracy of the measured antenna gain measurement.

Features: Broadband, Low VSWR; **Applications:** Telecom, Instrumentation, Laboratory Test, Radar.

How To Order:

QRHAW-X-Y-Z

Waveguide Size

Gain (dB)

Installation Method: Pannel Mount (P), Others (Leave blank)
(Note: Pannel mount only available with coaxial interface)

Connector Type
(Note: Leave blank if no Waveguide to Coax Adapter is selected)

Examples: To order a rectangular horn antenna, 26.5~40GHz, gain 15dB, WR-28, specify QRHA28-15.

'X' in the below table represents gain (dB). "Y" represents the type of coaxial connector (leave blank if waveguide interface is selected); "Z" represents the installation method (only available with coaxial interface).

Part Number	Frequency (GHz)	Gain (dB)	VSWR (Waveguide) (max.)	VSWR (Coaxial) (max.)	Interface	Flange	Connectors
QRHA10-X-Y-Z	73.8~112	15, 20, 25	1.2	1.6	WR10 (BJ900)	UG387/UM	1.0mm
QRHA12-X-Y-Z	60.5~91.9	10, 15, 20, 25	1.2	1.6	WR12 (BJ740)	UG387/U	1.0mm
QRHA15-X-Y-Z	49.8~75.8	10, 15, 20, 25	1.2	1.5	WR15 (BJ620)	UG385/U	1.85mm
QRHA19-X-Y-Z	39.2~59.6	10, 15, 20, 25	1.2	1.3	WR19 (BJ500)	UG383/UM	1.85mm
QRHA22-X-Y-Z	32.9~50.1	10, 15, 20, 25	1.2	1.3	WR22 (BJ400)	UG383/U	2.4mm
QRHA28-X-Y-Z	26.5~40	10, 15, 20, 25	1.2	1.4	WR28 (BJ320)	FBP320	2.92mm
QRHA34-X-Y-Z	21.7~33	10, 15, 20, 25	1.2	1.35	WR34 (BJ260)	FBP260	2.92mm
QRHA42-X-Y-Z	17.6~26.7	10, 15, 20, 25	1.2	1.5	WR42 (BJ220)	FBP220	2.92mm or SMA
QRHA51-X-Y-Z	14.5~22	10, 15, 20, 25	1.2	1.2	WR51 (BJ180)	FBP180	SMA
QRHA62-X-Y-Z	11.9~18	10, 15, 20, 25	1.2	1.4	WR62 (BJ140)	FBP140	SMA or N
QRHA75-X-Y-Z	9.84~15	10, 15, 20, 25	1.2	1.2	WR75 (BJ120)	FBP120	SMA or N
QRHA90-X-Y-Z	8.2~12.5	10, 15, 20, 25	1.2	1.4	WR90 (BJ100)	FBP100	SMA or N
QRHA112-X-Y-Z	6.57~9.99	10, 15, 20	1.2	1.4	WR112 (BJ84)	FBP84	SMA or N
QRHA137-X-Y-Z	5.38~8.17	10, 15, 20	1.2	1.4	WR137 (BJ70)	FDP70	SMA or N
QRHA159-X-Y-Z	4.64~7.05	10, 15, 20	1.2	1.2	WR159 (BJ58)	FDP58	SMA or N
QRHA187-X-Y-Z	3.94~5.99	10, 15, 20	1.2	1.6	WR187 (BJ48)	FDP48	SMA or N
QRHA229-X-Y-Z	3.22~4.9	10, 15, 20	1.2	1.4	WR229 (BJ40)	FDP40	SMA or N
QRHA284-X-Y-Z	2.6~3.95	10, 15, 20	1.2	1.4	WR284 (BJ32)	FDP32	SMA or N
QRHA340-15-Y-Z	2.17~3.3	15	-	1.4	WR340 (BJ26)	FDP26	SMA or N
QRHA510-15-Y-Z	1.45~2.2	15	-	1.4	WR510 (BJ18)	FDP18	SMA or N
QRHA770-15-Y-Z	0.96~1.46	15	-	1.4	WR770 (BJ12)	FDP12	SMA or N

Broadband Horn Antennas

Broadband horn antenna refers to a horn antenna that operates in a wide frequency band.

Features: Broadband, Low VSWR, Small Size; **Applications:** Wireless, Transceiver, Laboratory Test, Broadcast.

How To Order:

QDRHA-X-Y-Z

Start Frequency (MHz)
Stop Frequency (MHz)
Connector Type

Examples: To order a double ridged horn antenna, 0.4~4GHz, N, specify QDRHA-400-4000-N.

Part Number	Frequency (GHz)	Gain (dB)	VSWR (max.)	Interface	Material	Size (mm)
QDRHA-400-4000-N	0.4~4	6~17	2	N (f)	Aluminium	480*285*440
QDRHA-650-6000-N	0.65~6	6~16	2	N (f)	Aluminium	480*270*380
QDRHA-700-8000-S	0.7~8	10	2	SMA (f)	Aluminium	Φ220*262.5
QDRHA-800-18000-S	0.8~18	3.5~14.5	2	SMA (f)	Aluminium	222*130*212
QDRHA-1000-6000-N	1~6	10	2.5	N (f)	-	190*114.1*164.1
QDRHA-1000-18000-S	1~18	10.7	2.5	SMA (f)	-	284*160
QDRHA-1000-20000	1~20	12.58	2	-	-	243*163.5*205.7
QDRHA-18000-40000-K	18~40	16	2.5	2.92mm (f)	Silver Plated Copper	122*50*38

Conical Horn Antennas

Qualwave conical horn antennas cover frequency range up to 116GHz with high gain up to 25dB and low VSWR 1.25 max. The conical shape of these horns make them ideal for use in the feed section of tapered chambers.

Features: Broadband, Low VSWR; **Applications:** Wireless, Transceiver, Laboratory Test, Broadcast.

How To Order:

QCHAX-Y

Waveguide Size — Gain (dB)

Examples: To order a conical horn antenna, 7.27~9.97GHz, gain 15dB, C76, specify QCHA76-15.

'X' in the below table represents gain (dB).

Part Number	Frequency (GHz)	Gain (dB)	VSWR (max.)	Interface
QCHA22-X	2.07~2.83	10, 12, 15, 18	1.25	C22
QCHA25-X	2.42~3.31	10, 12, 15, 18	1.25	C25
QCHA30-X	2.83~3.88	10, 12, 15, 18	1.25	C30
QCHA35-X	3.13~4.54	10, 12, 15, 18	1.25	C35
QCHA40-X	3.89~5.33	12, 15, 18, 20	1.25	C40
QCHA48-X	4.54~6.23	12, 15, 18, 20	1.25	C48
QCHA56-X	5.3~7.27	12, 15, 18, 20	1.25	C56
QCHA65-X	6.21~8.51	12, 15, 18, 20	1.25	C65
QCHA76-X	7.27~9.97	15, 18, 20, 22	1.25	C76
QCHA89-X	8.49~11.6	15, 18, 20, 22	1.25	C89
QCHA104-X	9.97~13.7	15, 18, 20, 22	1.25	C104
QCHA120-X	11.6~15.9	15, 18, 20, 22	1.25	C120
QCHA140-X	13.4~18.4	18, 20, 22, 25	1.25	C140
QCHA165-X	15.9~22.8	18, 20, 22, 25	1.25	C165
QCHA190-X	18.2~24.9	18, 20, 22, 25	1.25	C190
QCHA220-X	21.2~29.1	18, 20, 22, 25	1.25	C220
QCHA255-X	24.3~33.2	18, 20, 22, 25	1.25	C255
QCHA290-X	28.3~38.8	18, 20, 22, 25	1.25	C290
QCHA330-X	31.8~43	18, 20, 22, 25	1.25	C330
QCHA380-X	36.4~49.8	18, 20, 22, 25	1.25	C380
QCHA430-X	42.4~58.1	18, 20, 22, 25	1.25	C430
QCHA495-X	46.3~63.5	18, 20, 22, 25	1.25	C495
QCHA580-X	56.6~77.5	18, 20, 22, 25	1.25	C580
QCHA660-X	63.5~87.2	18, 20, 22, 25	1.25	C660
QCHA765-X	72.7~99.7	18, 20, 22, 25	1.25	C765
QCHA890-X	84.8~116	18, 20, 22, 25	1.25	C890

Attenuators

Attenuator is an electronic component that provides attenuation. It is widely used in electronic equipment. Its main purposes are: (1) adjust the strength of the signal in the circuit; (2) In the comparison method measuring circuit, it can be used to directly read the attenuation of the tested network; (3) Improve impedance matching. If some circuits require a relatively stable load impedance, an Attenuator can be inserted between this circuit and the actual load impedance to buffer the change of impedance.

Qualwave supplies a series of attenuators, including fixed attenuators, manually variable attenuators ,digitally controlled attenuators and voltage controlled attenuators. The frequency range is up to 110GHz. We can also customize digitally controlled attenuators and voltage controlled attenuators according to customer's needs. No customization charge, no MOQ requirement for customization.

Coaxial Fixed Attenuators (50Ω)

Coaxial fixed attenuator, the attenuation is a fixed value, the attenuation curve fluctuates with the frequency, and the fluctuation range is accuracy.

How To Order:

QFAW-X-Y-Z

- Serial Number
- Stop Frequency (GHz)
- Connector Type (Customizable)
- Attenuation (dB)

Examples: To order a coaxial fixed attenuator, DC~67GHz, 1.85mm male to 1.85mm female, attenuation 20dB, specify QFA6702-67-20-V.

Features:

- ※ High Precision
- ※ High Power
- ※ Broadband

Applications:

- ※ Wireless
- ※ Radar
- ※ Laboratory Test

1W Series

1W, 1.0mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			3	6	10		
QFA11001-110-X-1	DC~110	1	-1.0/+2.0	-1.0/+2.0	-1.0/+2.0	1.6	1.0mm

'X' in the above table represents attenuation (dB). Size: L: 15.4mm. Operating temperature: -55~+125°C.

Derated linearly to 0.1W@125°C. Peak Power: 5W (5μS pulse width, 10% duty cycle).

2W Series

2W, 1.85mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	20	30		
QFA6702-67-X-V	DC~67	2	-1.0/+1.2	-1.2/+1.2	-1.5/+1.5	1.35	1.85mm

'X' in the above table represents attenuation (dB). Size: Φ9*18.5mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, 2.4mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)			Connector
			0	1~10/12/15/20	30	40/50	0~20	30	40~50	
QFA5002-50-X-2	DC~50	2	-0.2/+1.0	-1.0/+1.0	-1.0/+1.2	-1.5/+1.5	1.40	1.30	1.45	2.4mm

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ9*23.5mm; 30dB Size: Φ9*19.7mm. Operating temperature: -55~+125°C.

40, 50dB: Derated linearly to 0.2W@125°C. Peak Power@40, 50dB: 200W (5μS pulse width, 1% duty cycle).

30dB: Derated linearly to 0.5W@125°C. Peak Power@30dB: 20W (5μS pulse width, 1% duty cycle).

2W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)						VSWR (max.)			Connector
			0	1~3	4~15	20/25	30	40/50	0	1~30	40~40	
QFA4002-40-X-K	DC~40	2	-0.2/+0.8	±0.6	±0.7	±0.8	±1	-1.0/+2.0	1.35	1.25	1.40	2.92mm

'X' in the above table represents attenuation (dB). 0 dB Size: Φ9*21.9mm; 1~30 dB Size: Φ9*17.2mm; 40 dB Size: Φ8*47.6mm; 50 dB Size: Φ8*49mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power@1~30dB: 200W (5μS pulse width, 1% duty cycle); Peak Power@40dB & 50dB: 20W (5μS pulse width, 1% duty cycle).

2W, SMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30		
QFA4002-40-X-P	DC~40	2	0.2/+0.8	-0.4/+1.0	-0.6/+1.0	-1.2/+1.2	1.45	SMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20 dB Size: Φ4.8*16.6mm; 30, 40 dB Size: Φ4.8*18.6mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA2602-26.5-X-P	DC~26.5	2	-0.2/+0.6	-0.4/+0.8	-0.6/+0.8	-0.8/+1.0	1.40	SMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20 dB Size: Φ4.8*16.8mm; 30, 40 dB Size: Φ4.8*18.6mm. Operating temperature: -55~+85°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA1802-18-X-P	DC~18	2	-0.2/+0.4	-0.4/+0.6	-0.6/+0.6	-0.8/+0.8	1.35	SMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20 dB Size: Φ4.8*16.6mm; 30, 40dB Size: Φ4.8*18.6mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30		
QFA4002-40-X-G	DC~40	2	0.2/+0.8	-0.4/+1.0	-0.6/+1.0	-1.2/+1.2	1.45	SSMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ4.8*16.5mm; 30, 40dB Size: Φ4.8*18.5mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA2602-26.5-X-G	DC~26.5	2	-0.2/+0.6	-0.4/+0.8	-0.6/+0.8	-0.8/+1.0	1.40	SSMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ4.8*16.5mm; 30, 40dB Size: Φ4.8*18.5mm. Operating temperature: -55~+85°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMP

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA1802-18-X-G	DC~18	2	-0.2/+0.4	-0.4/+0.6	-0.6/+0.6	-0.8/+0.8	1.35	SSMP

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ4.8*16.5mm; 30, 40dB Size: Φ4.8*18.5mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30		
QFA4002-40-X-A	DC~40	2	0.2/+0.8	-0.4/+1.0	-0.6/+1.0	-1.2/+1.2	1.45	SSMA

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ7.3*25mm; 30, 40dB Size: Φ7.3*27mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@25°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA2602-26.5-X-A	DC~26.5	2	-0.2/+0.6	-0.4/+0.8	-0.6/+0.8	-0.8/+1.0	1.40	SSMA

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20 dB Size: Φ7.3*25mm; 30, 40 dB Size: Φ7.3*27mm. Operating temperature: -55~+85°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, SSMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			0	1~6	7~10/12/15/20	30/40		
QFA1802-18-X-A	DC~18	2	-0.2/+0.4	-0.4/+0.6	-0.6/+0.6	-0.8/+0.8	1.35	SSMA

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20dB Size: Φ7.3*25mm; 30, 40dB ize: Φ7.3*27mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

2W, 3.5mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)					VSWR (max.)	Connector
			1~19	20~30	40	50	60~70		
QFA2602-26.5-X-3	DC~26.5	2	-0.3/+1.0	-0.3/+1.0	-1.0/+1.5	-1.5/+1.5	-1.0/+1.0	1.25	3.5mm

'X' in the above table represents attenuation (dB). 1~20, 30 dB Size: Φ10*37mm; 40 dB Size: Φ10*40.3mm; 50~70 dB Size: Φ10*46mm. Operating temperature: -55~+85°C.

Derated linearly to 0.1W@120°C. Peak Power: 500W (5μS pulse width, 0.2% duty cycle).

2W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)						VSWR (max.)		Connector
			0	1-6	7~10/12/15/20	30/40	50/60/70	80/90	0~40	50~90	
QFA2602-26.5-X-S	DC~26.5	2	-0.2/+0.6	-0.4/+0.8	-0.6/+0.8	-0.8/+1.0	-2.0/+2.0	-	1.40	1.35	SMA

'X' in the above table represents attenuation (dB). 0~10, 12, 15, 20 dB Size: Φ9*21.6mm; 30, 40 dB Size: Φ9*25.1mm; 50~90 dB Size: Φ10*43mm. Operating temperature: -55~+85°C.

Derated linearly to 0.1W@120°C. Peak Power@0~40dB: 20W (5μS pulse width, 1% duty cycle); Peak Power@50~70dB: 500W (5μS pulse width, 0.4% duty cycle).

2W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)						VSWR (max.)		Connector
			0	1~6	7~10/12/15/20	30/40	50	60	0~50	60	
QFA1802-4-X-S	DC~4	2	-0.2/+0.2	-0.4/+0.4	-0.6/+0.4	-0.8/+0.6	-1.0/+0.9	±0.8	1.25	1.2	SMA
QFA1802-8-X-S	DC~8	2	-0.2/+0.2	-0.4/+0.4	-0.6/+0.4	-0.8/+0.6	-1.0/+0.9	±0.9	1.25	1.25	SMA
QFA1802-12.4-X-S	DC~12.4	2	-0.2/+0.3	-0.4/+0.5	-0.6/+0.5	-0.8/+0.7	-1.0/+1.0	±1.1	1.30	1.25	SMA
QFA1802-18-X-S	DC~18	2	-0.2/+0.4	-0.4/+0.6	-0.6/+0.6	-0.8/+0.8	-1.0/+1.5	±1.5	1.35	1.30	SMA

'X' in the above table represents attenuation (dB). 0~10, 12 dB Size: Φ9*21.6mm; 15, 20, 30, 40, 50 dB Size: Φ9*25.1mm; 60 dB Size: Φ9*30mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power@0~50dB: 20W (5μS pulse width, 1% duty cycle); Peak Power@60dB: 500W (5μS pulse width, 0.2% duty cycle).

2W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	11~20	21~30		
QFA0602-6-X-S	DC~6	2	-0.6/+0.6	-0.8/+0.8	-1.0/+1.0	1.20	SMA

'X' in the above table represents attenuation (dB). Size: Φ9.1*25.6mm. Operating temperature: -55~+125°C.

2W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			1~10	20	30	40	50	60		
QFA1802-4-X-N	DC~4	2	0.4	0.5	0.6	0.7	0.7	0.8	1.20	N
QFA1802-8-X-N	DC~8	2	0.5	0.6	0.8	0.8	0.8	0.9	1.20	N
QFA1802-12.4-X-N	DC~12.4	2	0.6	0.7	0.8	0.9	1.0	1.1	1.30	N
QFA1802-18-X-N	DC~18	2	0.7	0.8	1.0	1.2	-	-	1.35	N

'X' in the above table represents attenuation (dB). 1~10, 20, 30 dB Size: Φ16.5*45mm; 40, 50, 60 dB Size: Φ16.5*48mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 500W (5μS pulse width, 0.2% duty cycle).

2W, TNC

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			1~10	11~20	21~30	40	50	60		
QFA1802-4-X-T	DC~4	2	0.4	0.5	0.7	0.7	0.7	0.8	1.20	TNC
QFA1802-8-X-T	DC~8	2	0.5	0.6	0.8	0.8	0.8	0.9	1.25	TNC
QFA1802-12.4-X-T	DC~12.4	2	0.6	0.7	0.9	0.9	1.0	1.1	1.35	TNC
QFA1802-18-X-T	DC~18	2	0.6	0.8	1.0	1.2	1.5	1.5	1.30	TNC

'X' in the above table represents attenuation (dB). Size: Φ15*35mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 500W (5μS pulse width, 0.2% duty cycle).

2W, BNC

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~7	7~20	21~30	40~60		
QFA1802-4-X-B	DC~4	2	0.3	0.5	0.75	0.8	1.25	BNC
QFA1802-6-X-B	DC~6	2	0.3	0.5	0.75	0.8	1.25	BNC

'X' in the above table represents attenuation (dB). 1~10, 20, 30 dB Size: Φ14.5*35mm; 40, 50, 60 dB Size: Φ14.5*38mm. Temperature: -55~+125°C.

Derated linearly to 0.1W@120°C. Peak Power: 500W (5μS pulse width, 0.2% duty cycle).

5W Series

5W, 1.85mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	20	30		
QFA6705-67-X-V	DC~67	5	-1.0/+1.5	-1.2/+1.5	-1.5/+2.0	1.4	1.85mm

'X' in the above table represents attenuation (dB). Size: Φ31.8*17.8mm (exclude connector). Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

5W, 2.4mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	20	30		
QFA5005-50-X-2	DC~50	5	-1.0/+1.2	-1.0/+1.2	-1.0/+1.2	1.3	2.4mm

'X' in the above table represents attenuation (dB). Size: Φ31.8*17.8mm (exclude connector). Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 2.5% duty cycle).

5W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	20/30	40		
QFA4005-40-X-K	DC~40	5	-0.7/+1.0	-0.7/+1.0	-1.0/+2.0	1.25	2.92mm

'X' in the above table represents attenuation (dB). 1~30 dB Size: Φ15.8*39.6mm; 40dB: Φ38*47.6mm. Operating temperature: -55~+85°C.

Derated linearly to 0.5W@125°C. Peak Power@1~30dB: 200W (5μS pulse width, 1.25% duty cycle); Peak Power@40dB: 50W (5μS pulse width, 1% duty cycle).

5W, 3.5mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20/30/40	50/60/70	80		
QFA2605-26.5-X-3	DC~26.5	5	-1.0/+1.0	-0.5/+1.2	-1.0/+1.5	-1.2/+1.5	1.25	3.5mm

'X' in the above table represents attenuation (dB). 1~20, 30 dB Size: Φ15.7*37mm; 40 dB Size: Φ16.5*40.3mm; 50, 60, 70, 80 dB Size: Φ16.5*46mm. Operating temperature: -55~+85°C.

Derated linearly to 0.5W@125°C. Peak Power: 1KW (5μS pulse width, 0.5% duty cycle).

5W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	20	30	40/50		
QFA2605-26.5-X-S	DC~26.5	5	-0.7/+0.7	-0.7/+0.7	-0.8/+0.8	-0.5/+1.5	1.35	SMA

'X' in the above table represents attenuation (dB). 1~20 dB Size: Φ19*27mm; 30 dB Size: Φ19*30mm; 40, 50 dB Size: Φ16.5*37mm. Operating temperature: -55~+85°C.

Derated linearly to 0. 25W@120°C@1~30dB; Derated linearly to 0.5W@125°C@40~50dB.

Peak Power@1~30dB: 200W (5μS pulse width, 0.012% duty cycle); Peak Power@40~50dB: 1KW (5μS pulse width, 0.5% duty cycle).

5W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	11~20	21~30		
QFA1805-4-X-S	DC~4	5	0.4	0.5	0.7	1.20	SMA
QFA1805-8-X-S	DC~8	5	0.5	0.6	0.8	1.25	SMA
QFA1805-12.4-X-S	DC~12.4	5	0.6	0.7	0.9	1.35	SMA
QFA1805-18-X-S	DC~18	5	0.6	0.8	1.0	1.45	SMA

'X' in the above table represents attenuation (dB). Size: Φ19*27mm. Temperature: -55~+125°C.

Derated linearly to 0. 25W@120°C. Peak Power: 500W (5μS pulse width, 0.5% duty cycle).

5W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			1~10	20	30	40	50	60		
QFA1805-4-X-N	DC~4	5	0.4	0.5	0.6	0.7	0.7	0.8	1.15	N
QFA1805-8-X-N	DC~8	5	0.5	0.6	0.8	0.8	0.8	0.9	1.20	N
QFA1805-12.4-X-N	DC~12.4	5	0.6	0.7	0.8	0.9	1.0	1.1	1.30	N
QFA1805-18-X-N	DC~18	5	0.7	0.8	1.0	1.2	1.3	1.3	1.35	N

'X' in the above table represents attenuation (dB). Size: Φ16.5*58mm. Temperature: -55~+125°C.

Derated linearly to 0. 25W@120°C. Peak Power: 500W (5μS pulse width, 0.25% duty cycle).

10W Series

10W, 1.85mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)	VSWR (max.)	Connector
			20		
QFA6710-67-20-V	DC~67	10	-1.5/+2.0	1.45	1.85mm

Size: Φ40*70.7mm. Operating temperature: -55~+125°C. Non-operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

10W, 2.4mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1~10	20	30		
QFA5010-50-X-2	DC~50	10	-1.5/+2.0	-1.5/+2.0	-1.5/+2.0	1.4	2.4mm

'X' in the above table represents attenuation (dB). Size: Φ40*70.7mm. Operating temperature: -55~+125°C.

Derated linearly to 1W@125°C. Peak Power: 20W (5μS pulse width, 1% duty cycle).

10W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)		Connector
			1~10	20/30	40	1~30	40	
QFA4010-40-X-K	DC~40	10	-0.7/+1.0	-0.7/+1.0	-1.0/+2.0	1.25	1.4	2.92mm

'X' in the above table represents attenuation (dB). 1~30 dB Size: Φ31.8*39.6mm; 40dB: Φ38*47.6mm. Operating temperature: -55~+85°C.

Derated linearly to 0.5W@125°C. Peak Power@1~30dB: 100W (5μS pulse width, 5% duty cycle); Peak Power@40dB: 200W (5μS pulse width, 1.25% duty cycle).

10W, 3.5mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	20/30/40	50/60	70		
QFA2610-26.5-X-3	DC~26.5	10	-1.0/+1.0	-0.5/+1.2	-1.0/+1.5	-1.2/+1.8	1.25	3.5mm

'X' in the above table represents attenuation (dB). Size: Φ26*45.8mm. Operating temperature: -55~+85°C.

Derated linearly to 1W@125°C. Peak Power: 1KW (5μS pulse width, 0.5% duty cycle).

10W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~40		
QFA2610-26.5-X-S	DC~26.5	10	-1.0/+1.0	-1.1/+1.1	-1.2/+1.2	-1.3/+1.3	1.35	SMA

'X' in the above table represents attenuation (dB). Size: Φ15.8*47.5mm. Operating temperature: -55~+85°C.

Derated linearly to 0.5W@120°C. Peak Power: 500W (5μS pulse width, 1% duty cycle).

10W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~40		
QFA1810-4-X-S	DC~4	10	0.4	0.5	0.6	0.7	1.20	SMA
QFA1810-8-X-S	DC~8	10	0.5	0.6	0.8	0.8	1.25	SMA
QFA1810-12.4-X-S	DC~12.4	10	0.6	0.7	0.8	0.9	1.35	SMA
QFA1810-18-X-S	DC~18	10	0.8	0.9	1.0	1.2	1.45	SMA

'X' in the above table represents attenuation (dB). Size: Φ15.8*47.5mm. Temperature: -55~+125°C.

Derated linearly to 0.5W@120°C. Peak Power: 500W (5μS pulse width, 1% duty cycle).

10W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~40		
QFA1810-4-X-N	DC~4	10	0.4	0.5	0.6	0.7	1.20	N
QFA1810-8-X-N	DC~8	10	0.5	0.6	0.8	0.8	1.25	N
QFA1810-12.4-X-N	DC~12.4	10	0.6	0.7	0.8	0.9	1.35	N
QFA1810-18-X-N	DC~18	10	0.8	0.9	1.0	1.2	1.45	N

'X' in the above table represents attenuation (dB). Size: Φ30*84.5mm. Temperature: -55~+125°C.

Derated linearly to 0.5W@120°C. Peak Power: 1KW (5μS pulse width, 0.5% duty cycle).

20W Series

20W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)		Connector
			3~10	15/20/30	40	3~30	40	
QFA4020-40-X-K	DC~40	20	-1.5/+1.5	-1.5/+1.5	-1.0/+2.0	1.3	1.4	2.92mm

'X' in the above table represents attenuation (dB). 3~30 dB Size: Φ44*55.6mm; 40dB: Φ45*96mm. Operating temperature: -55~+85°C.

Derated linearly to 1W@120°C. Peak Power@3~30dB: 200W (5μS pulse width, 10% duty cycle); Peak Power@40dB: 200W (5μS pulse width, 5% duty cycle).

20W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR	Connector
			10	20	30	(max.)	
QFA2620-26.5-X-S	DC~26.5	20	-1.5/+1.5	-1.5/+1.5	-1.5/+1.5	1.30	SMA

'X' in the above table represents attenuation (dB). Size: Φ44*54.7mm. Operating temperature: -55~+125°C.

Derated linearly to 2W@125°C. Peak Power: 200W (5μS pulse width, 10% duty cycle).

20W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			1~10	11~20	21~30	31~40	41~50	51~60		
QFA1820-4-X-S	DC~4	20	0.4	0.5	0.6	0.7	0.8	0.9	1.20	SMA
QFA1820-8-X-S	DC~8	20	0.5	0.6	0.8	0.8	0.8	1.0	1.25	SMA
QFA1820-12.4-X-S	DC~12.4	20	0.6	0.7	0.8	0.9	1.0	1.2	1.30	SMA
QFA1820-18-X-S	DC~18	20	0.6	0.8	1.0	1.2	1.3	1.5	1.35	SMA

'X' in the above table represents attenuation (dB). Size: Φ15*73.5mm. Temperature: -55~+125°C.

Derated linearly to 1W@120°C. Peak Power: 500W (5μS pulse width, 2% duty cycle).

20W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~40		
QFA1820-4-X-N	DC~4	20	0.4	0.5	0.6	0.7	1.20	N
QFA1820-8-X-N	DC~8	20	0.5	0.6	0.8	0.8	1.25	N
QFA1820-12.4-X-N	DC~12.4	20	0.6	0.7	0.8	0.9	1.35	N
QFA1820-18-X-N	DC~18	20	0.6	0.8	1.0	1.2	1.45	N

'X' in the above table represents attenuation (dB). Size: Φ38*84.5mm. Temperature: -55~+125°C.

Derated linearly to 1W@120°C. Peak Power: 1KW (5μS pulse width, 1% duty cycle).

25W Series

25W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	40~50		
QFA1825-4-X-S	DC~4	25	0.4	0.5	0.6	0.7	1.20	SMA
QFA1825-8-X-S	DC~8	25	0.5	0.6	0.8	0.8	1.25	SMA
QFA1825-12.4-X-S	DC~12.4	25	0.7	0.8	0.9	1.0~1.1	1.35	SMA
QFA1825-18-X-S	DC~18	25	0.8	0.9	1.1	1.2~1.3	1.45	SMA

'X' in the above table represents attenuation (dB). Size: Φ44*94mm. Temperature: -55~+125°C.

Derated linearly to 1.25W@120°C. Peak Power: 500W (5μS pulse width, 2.5% duty cycle).

25W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	40~50		
QFA1825-4-X-N	DC~4	25	0.4	0.5	0.6	0.7	1.20	N
QFA1825-8-X-N	DC~8	25	0.5	0.6	0.8	0.8	1.25	N
QFA1825-12.4-X-N	DC~12.4	25	0.7	0.8	0.9	1.0~1.1	1.35	N
QFA1825-18-X-N	DC~18	25	0.8	0.9	1.1	1.2~1.3	1.45	N

'X' in the above table represents attenuation (dB). Size: Φ44*89mm. Temperature: -55~+125°C.

Derated linearly to 1.25W@120°C. Peak Power@DC~12.4GHz: 5000W (5μS pulse width, 1.25% duty cycle); Peak Power@18GHz: 1000W (5μS pulse width, 1.25% duty cycle).

30W Series

30W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			10/20	30	40		
QFA4030-40-X-K	DC~40	30	-1.5/+2.0	-1.5/+2.0	-1.5/+2.0	1.35	2.92mm

'X' in the above table represents attenuation (dB). Size: Φ54*63.6mm. Operating temperature: -55~+125°C.

Derated linearly to 3W@125°C. Peak Power: 200W (5μS pulse width, 10% duty cycle).

30W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			1-5/ 6-10	20/30/40	50/60		
QFA2630-26.5-X-S	DC~26.5	30	-	-1.5/+1.5	-	1.30	SMA

'X' in the above table represents attenuation (dB). 1~10, 50, 60 dB Size: Φ38*59.2mm; 20, 30, 40dB Size: Φ54*62.7mm. Operating temperature: -55~+125°C.

Derated linearly to 3W@125°C. Peak Power: 200W (5μS pulse width, 10% duty cycle).

30W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~40		
QFA1830-4-X-S	DC~4	30	0.4	0.5	0.6	0.7	1.20	SMA
QFA1830-8-X-S	DC~8	30	0.5	0.6	0.8	0.8	1.25	SMA
QFA1830-12.4-X-S	DC~12.4	30	0.6	0.7	0.8	0.9	1.35	SMA
QFA1830-18-X-S	DC~18	30	0.8	0.9	1.2	1.5	1.45	SMA

'X' in the above table represents attenuation (dB). Size: Φ38*110mm. Temperature: -55~+125°C.

Derated linearly to 1.5W@120°C. Peak Power: 500W (5μS pulse width, 6% duty cycle).

30W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	40~50		
QFA1830-4-X-N	DC~4	30	0.4	0.5	0.6	0.7	1.20	N
QFA1830-8-X-N	DC~8	30	0.5	0.6	0.8	0.8	1.25	N
QFA1830-12.4-X-N	DC~12.4	30	0.6	0.7	0.8	0.9	1.35	N
QFA1830-18-X-N	DC~18	30	0.8	0.9	1.2	1.5	1.45	N

'X' in the above table represents attenuation (dB). Size: Φ38*105mm. Temperature: -55~+125°C.

Derated linearly to 1.25W@120°C. Peak Power@DC~12.4GHz: 5000W (5μS pulse width, 0.15% duty cycle); Peak Power@18GHz: 1000W (5μS pulse width, 0.15% duty cycle).

50W Series

50W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			20	30	40		
QFA4050-40-X-K	DC~40	50	-3.0/+3.0	-3.0/+3.0	-3.0/+3.0	1.35	2.92mm

'X' in the above table represents attenuation (dB). Size: Φ54*109.8mm. Operating temperature: -55~+125°C.

Derated linearly to 2.5W@120°C.

50W, 3.5mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)		Connector
			3	6	10/20/30/40	50/60	3/6/50/60	10/20/30/40	
QFA2650-26.5-X-3	DC~26.5	50	-0.8/+1.0	-1.0/+1.7	-2.0/+2.0	-1.0/+1.0	1.3	1.35	3.5mm

'X' in the above table represents attenuation (dB). 3, 6, 50, 60 dB Size: Φ63*74mm; 10, 20, 30, 40 dB Size: Φ54*128.1mm . Operating temperature: -55~+85°C.

Derated linearly to 5W@125°C. 3, 6, 50, 60dB Peak Power: 1000W (5μS pulse width, 2.5% duty cycle); 10, 20, 30, 40dB Peak Power: 200W (5μS pulse width, 10% duty cycle).

50W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~9	10	20/30/40	50/60		
QFA2650-26.5-X-S	DC~26.5	50	-1.0/+2.5	-2.0/+2.0	-2.0/+2.0	-1.0/+1.0	1.30	SMA

'X' in the above table represents attenuation (dB). 1~9 dB Size: Φ38*90mm; 10, 20, 30, 40 dB Size: Φ54*109.7mm; 50, 60 dB Size: Φ63*71mm. Operating temperature: -55~+85°C.

Derated linearly to 5W@125°C. 10, 20, 30, 40dB Peak Power: 200W (5μS pulse width, 10% duty cycle); 50, 60dB Peak Power: 500W (5μS pulse width, 10% duty cycle);

1~9dB Peak Power: 500W (5μS pulse width, 5% duty cycle).

50W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~50		
QFA1850-4-X-S	DC~4	50	0.4	0.5	0.7	0.7	1.20	SMA
QFA1850-8-X-S	DC~8	50	0.5	0.6	0.8	0.8	1.25	SMA
QFA1850-12.4-X-S	DC~12.4	50	0.6	0.7	0.8	1.1	1.35	SMA
QFA1850-18-X-S	DC~18	50	0.8	0.9	1.1	1.3	1.45	SMA

'X' in the above table represents attenuation (dB). Size: Φ64*110.5mm. Temperature: -55~+125°C.

Derated linearly to 2.5W@120°C. Peak Power: 500W (5μS pulse width, 5% duty cycle).

50W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			1~10	11~20	21~30	31~50		
QFA1850-4-X-N	DC~4	50	0.4	0.5	0.7	0.7	1.20	N
QFA1850-8-X-N	DC~8	50	0.5	0.6	0.8	0.8	1.25	N
QFA1850-12.4-X-N	DC~12.4	50	0.6	0.7	0.8	1.1	1.35	N
QFA1850-18-X-N	DC~18	50	0.8	0.9	1.1	1.3	1.45	N

'X' in the above table represents attenuation (dB). Size: Φ64*105mm. Temperature: -55~+125°C.

Derated linearly to 2.5W@120°C. Peak Power@DC~12.4GHz: 5000W (5μS pulse width, 0.5% duty cycle); Peak Power@18GHz: 1000W (5μS pulse width, 2.5% duty cycle).

100W Series

100W, 2.92mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Connector
			20	30	40		
QFA40K1-40-X-K	DC~40	100	-4.0/+4.0	-4.0/+4.0	-4.0/+4.0	1.40	2.92mm

'X' in the above table represents attenuation (dB). Size: 160*178*90mm. Operating temperature: -55~+125°C.

Derated linearly to 10W@125°C.

100W, 3.5mm

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)					VSWR (max.)	Connector
			3	6	10	20	30/40/50		
QFA26K1-26.5-X-3	DC~26.5	100	-1.0/+1.5	-1.0/+2.5	-1.0/+3.5	-1.0/+3.0	-1.0/+1.5	1.40	3.5mm

'X' in the above table represents attenuation (dB). Size: Φ63*129mm. Operating temperature: -55~+85°C.

Derated linearly to 5W@120°C. Peak Power: 0.5KW (5μS pulse width, 2.5% duty cycle).

100W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	11~20	21~30	31~40	41~60			
QFA18K1-4-X-S1 QFA18K1-4-X-S2	DC~4	100	0.4	0.7	0.7	0.8	0.8	0.9~1.0	1.20	Cylinder Cuboid	SMA
QFA18K1-8-X-S1 QFA18K1-8-X-S2	DC~8	100	0.5	0.8	0.8	0.9	0.9	1.0	1.25	Cylinder Cuboid	SMA
QFA18K1-12.4-X-S1 QFA18K1-12.4-X-S2	DC~12.4	100	0.6	0.9	0.9	1.0	1.0	1.1	1.35	Cylinder Cuboid	SMA
QFA18K1-18-X-S1 QFA18K1-18-X-S2	DC~18	100	0.8	1.5	1.5	1.3	1.3	1.4	1.45	Cylinder Cuboid	SMA

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: Size: Φ64*161mm.

Cuboid: Size: 161*120*110mm.

Derated linearly to 5W@120°C. Peak Power@DC~12.4GHz: 1KW (5μS pulse width, 7.5% duty cycle); Peak Power@18GHz: 500W (5μS pulse width, 10% duty cycle).

100W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)					VSWR (max.)	Connector
			3	6	10	20	30/40/50		
QFA26K1-26.5-X-S	DC~26.5	100	-1.0/+1.5	-1.0/+2.5	-1.0/+3.5	-1.0/+3.0	-1.0/+1.5	1.40	SMA

'X' in the above table represents attenuation (dB). Size: Φ63*129mm. Operating temperature: -55~+85°C.

Derated linearly to 5W@120°C. Peak Power: 0.5KW (5μS pulse width, 2.5% duty cycle).

100W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	11~20	21~30	31~40	41~60			
QFA18K1-4-X-N1 QFA18K1-4-X-N2	DC~4	100	0.4	0.7	0.7	0.8	0.8	0.9~1.0	1.20	Cylinder Cuboid	N
QFA18K1-8-X-N1 QFA18K1-8-X-N2	DC~8	100	0.5	0.8	0.8	0.9	0.9	1.0	1.25	Cylinder Cuboid	N
QFA18K1-12.4-X-N1 QFA18K1-12.4-X-N2	DC~12.4	100	0.6	0.9	0.9	1.0	1.0	1.1	1.35	Cylinder Cuboid	N
QFA18K1-18-X-N1 QFA18K1-18-X-N2	DC~18	100	0.8	1.5	1.5	1.3	1.3	1.4	1.45	Cylinder Cuboid	N

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: 3 dB Size: Φ64*105mm; 6~60 dB Size: Φ64*156mm.

Cuboid: Size: 156*120*110mm.

Derated linearly to 5W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 1% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 5% duty cycle).

100W, 7/16(DIN)

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	11~20	21~30	31~40	41~60			
QFA18K1-4-X-7 QFA18K1-4-X-7NF	DC~4	100	0.4	0.7	0.7	0.8	0.8	0.9~1.0	1.20	Cylinder Cylinder	7/16(DIN) 7/16(DIN)/N (f)
QFA18K1-6-X-7 QFA18K1-6-X-7NF	DC~6	100	0.5	0.8	0.8	0.9	0.9	1.0	1.25	Cylinder Cylinder	7/16(DIN) 7/16(DIN)/N (f)

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: 7/16(DIN), Size: Φ41*179mm.

Cylinder: Input: 7/16(DIN) male, Output: N female, Size: Φ64*160mm.

Derated linearly to 5W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 1% duty cycle).

100W, 4.3-10

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	11~20	21~30	31~40	41~60			
QFA18K1-4-X-4FSF1 QFA18K1-4-X-4SF1	DC~4	100	0.4	0.7	0.7	0.8	0.8	0.9~1.0	1.20	Cylinder	4.3-10/ SMA
QFA18K1-6-X-4FSF1 QFA18K1-6-X-4SF1	DC~6	100	0.5	0.8	0.8	0.9	0.9	1.0	1.25	Cylinder	4.3-10/ SMA

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: Input: 4.3-10 female, Output: SMA female, Size: Φ64*160mm.

Cylinder: Input: 4.3-10 male, Output: SMA female, Size: Φ64*160mm.

Derated linearly to 5W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 1% duty cycle).

150W Series

150W, SMA

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	20	30	40	50~60			
QFA18K15-4-X-S1 QFA18K15-4-X-S2 QFA18K15-4-X-SFSF1 QFA18K15-4-X-SFSF2	DC~4	150	0.7	0.7	0.7	0.8	0.9	0.9	1.20	Cylinder Cuboid Cylinder Cuboid	SMA
QFA18K15-8-X-S1 QFA18K15-8-X-S2 QFA18K15-8-X-SFSF1 QFA18K15-8-X-SFSF2	DC~8	150	0.8	0.8	0.8	0.9	0.9	0.9	1.25	Cylinder Cuboid Cylinder Cuboid	SMA
QFA18K15-12.4-X-S1 QFA18K15-12.4-X-S2 QFA18K15-12.4-X-SFSF1 QFA18K15-12.4-X-SFSF2	DC~12.4	150	-	0.9	0.9	1.0	1.1	1.1	1.35	Cylinder Cuboid Cylinder Cuboid	SMA
QFA18K15-18-X-S1 QFA18K15-18-X-S2 QFA18K15-18-X-SFSF1 QFA18K15-18-X-SFSF2	DC~18	150	-	2.0	1.5	1.5	1.3	1.4	1.45	Cylinder Cuboid Cylinder Cuboid	SMA

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: 6~60 dB Size: Φ64*235.5mm; SMA female, 6~60dB Size: Φ64*234mm.

Cuboid: 6~60 dB Size: 212*120*110mm; SMA female, 6~60dB Size: 211*120*110mm.

Derated linearly to 7.5W@120°C. Peak Power@DC~12.4GHz: 1KW (5μS pulse width, 10% duty cycle); Peak Power@18GHz: 500W (5μS pulse width, 15% duty cycle).

150W, N

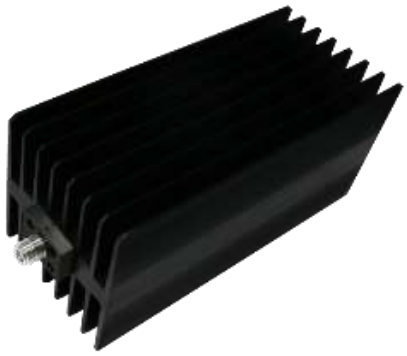
Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Shape	Connector
			3	6~10	20	30	40	50~60			
QFA18K15-4-X-N1 QFA18K15-4-X-N2 QFA18K15-4-X-NFNF1 QFA18K15-4-X-NFNF2	DC~4	150	0.7	0.7	0.7	0.8	0.9	0.9	1.20	Cylinder Cuboid Cylinder Cuboid	N
QFA18K15-8-X-N1 QFA18K15-8-X-N2 QFA18K15-8-X-NFNF1 QFA18K15-8-X-NFNF2	DC~8	150	0.8	0.8	0.8	0.9	0.9	0.9	1.25	Cylinder Cuboid Cylinder Cuboid	N
QFA18K15-12.4-X-N1 QFA18K15-12.4-X-N2 QFA18K15-12.4-X-NFNF1 QFA18K15-12.4-X-NFNF2	DC~12.4	150	-	0.9	0.9	1.0	1.1	1.1	1.35	Cylinder Cuboid Cylinder Cuboid	N
QFA18K15-18-X-N1 QFA18K15-18-X-N2 QFA18K15-18-X-NFNF1 QFA18K15-18-X-NFNF2	DC~18	150	-	2.0	1.5	1.5	1.3	1.4	1.45	Cylinder Cuboid Cylinder Cuboid	N

'X' in the above table represents attenuation (dB). Temperature: -55~+125°C.

Cylinder: 3 dB Size: Φ64*156mm; 6~60 dB Size: Φ64*230mm; N female, 6~60dB Size: Φ64*225mm.

Cuboid: 3 dB Size: 156*120*110mm; 6~60 dB Size: 207*120*110mm; N female, 6~60dB Size: 202*120*110mm.

Derated linearly to 7.5W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 1% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 5% duty cycle).



200W~600W Series

200W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			10	20	30	40	50	60		
QFA18K2-4-X-N	DC~4	200	0.7	0.7	0.8	0.9	0.9	0.9	1.20	N
QFA18K2-8-X-N	DC~8	200	0.8	0.8	0.9	0.9	0.9	0.9	1.25	N
QFA18K2-12.4-X-N	DC~12.4	200	1.5	0.9	1.0	1.1	1.1	1.1	1.35	N
QFA18K2-18-X-N	DC~18	200	3.5	2.5	1.5	1.3	1.4	1.4	1.45	N

'X' in the above table represents attenuation (dB). Size: 203*120*110mm (exclude connector). Temperature: -55~+125°C.

Derated linearly to 10W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 2% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 10% duty cycle).

250W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)						VSWR (max.)	Connector
			10	20	30	40	50	60		
QFA18K25-4-X-N	DC~4	250	0.7	0.7	0.8	0.9	0.9	0.9	1.20	N
QFA18K25-8-X-N	DC~8	250	0.8	0.8	0.9	0.9	0.9	0.9	1.25	N
QFA18K25-12.4-X-N	DC~12.4	250	2.5	0.9	1.0	1.1	1.1	1.1	1.35	N
QFA18K25-18-X-N	DC~18	250	3	-	1.5	1.3	1.4	1.4	1.45	N

'X' in the above table represents attenuation (dB). Size: 254*120*110mm (exclude connector). Temperature: -55~+125°C.

Derated linearly to 12.5W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 2.5% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 12.5% duty cycle).

300W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)								VSWR (max.)	Connector
			3	6	10	20	30	40	50	60		
QFA18K3-4-X-N	DC~4	300	-	-	0.7	0.7	0.8	0.9	0.9	0.9	1.20	N
QFA18K3-8-X-N	DC~8	300	-	-	0.8	0.8	0.9	0.9	0.9	0.9	1.25	N
QFA18K3-12.4-X-N	DC~12.4	300	-	-	3.0	0.9	1.0	1.1	1.1	1.1	1.35	N
QFA18K3-18-X-N	DC~18	300	-	-	3.5	-	1.5	1.3	1.3	1.4	1.45	N

'X' in the above table represents attenuation (dB).

10~60dB, DC~18GHz Size: 305*120*110mm (exclude connector). Temperature: -55~+125°C.

Derated linearly to 15W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 3% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 15% duty cycle).

400W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)				VSWR (max.)	Connector
			20	30	40	50~60		
QFA18K4-4-X-N	DC~4	400	1.2	0.8	0.9	0.9	1.20	N
QFA18K4-8-X-N	DC~8	400	1.5	0.9	0.9	0.9	1.25	N
QFA18K4-12.4-X-N	DC~12.4	400	2.0	1.0	1.1	1.1	1.35	N
QFA18K4-18-X-N	DC~18	400	4.5	1.5	1.5	1.5	1.45	N

'X' in the above table represents attenuation (dB). Size: 462*120*110mm. Temperature: -55~+125°C.

Derated linearly to 20W@120°C. Peak Power@DC~12.4GHz: 5000W (5μS pulse width, 4% duty cycle); Peak Power@18GHz: 1000W (5μS pulse width, 20% duty cycle).

500W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)					VSWR (max.)	Connector
			3	10	20	30	40/50/60		
QFA18K5-4-X-N QFA18K5-4-X-NF	DC~4	500	+2.3	-0.6/+1.5	1.2	1.0	1.0	1.25	N
QFA18K5-8-X-N QFA18K5-8-X-NF	DC~8	500	+3.5	-0.5/+2.0	2.0	1.5	1.1	1.30	N
QFA18K5-12.4-X-N QFA18K5-12.4-X-NF	DC~12.4	500	-	3.0	2.0	-1.5/+2.0	1.2	1.35	N
QFA18K5-18-X-N QFA18K5-18-X-NF	DC~18	500	-	6.0	5.0	0/+6.0	1.5	1.50	N

'X' in the above table represents attenuation (dB). N male Input, N femaleOutput, 10~60dB, DC~18GHz Size: 564*120*110mm (exclude connector);

N female, 3dB, DC~8GHz Size: 304*120*110mm (exclude connector)Temperature: -55~+125°C.

Derated linearly to 25W@120°C. Peak Power@DC~12.4GHz: 5KW (5μS pulse width, 5% duty cycle); Peak Power@18GHz: 1KW (5μS pulse width, 25% duty cycle).

600W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (±dB) and Attenuation (dB)							VSWR (max.)	Connector
			3	6	10	20	30	40	50/60		
QFA18K6-4-X-N QFA18K6-4-X-NF	DC~4	600	0/+2	-1/+1.5	-0.6/+1.5	1.2	1.0	1.0	1.0	1.25	N
QFA18K6-8-X-N QFA18K6-8-X-NF	DC~8	600	-	-	-0.5/+2.0	2.0	1.1	1.1	1.1	1.30	N
QFA18K6-12.4-X-N QFA18K6-12.4-X-NF	DC~12.4	600	-	-	3.0	2.0	-1.5/+2.0	1.2	1.2	1.35	N
QFA18K6-18-X-N QFA18K6-18-X-NF	DC~18	600	-	-	6.0	5.0	-2.0/+6.0	2.0	1.5	1.50	N

'X' in the above table represents attenuation (dB). N maleInput – female utput, 3 dB Size: 305*120*110mm (exclude connector); 6 dB Size: 407*120*110mm (exclude connector);

10~60 dB Size: 509*120*110mm (exclude connector). Temperature: -55~+125°C.

N female Input Output, 10~60dB Size: 509*120*110mm.

Derated linearly to 30W@120°C. Peak Power@DC~12.4GHz: 5000W (5μS pulse width, 6% duty cycle); Peak Power@18GHz: 1000W (5μS pulse width, 30% duty cycle).

1000W~5000W Series

1000W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)	VSWR (max.)	Connector
			30~50dB		
QFA031K-3-X-N	DC~3GHz	1000	±2dB	1.35	N

'X' in the above table represents attenuation (dB). Size: 614*360*140mm. Temperature: -55~+125°C. Derated linearly to 50W@120°C.

1500W, N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			20	30	40	50		
QFA031K5-3-X-N	DC~3GHz	1500	±3.0	±2.5	±2.5	±2.5	1.25	N

'X' in the above table represents attenuation (dB). Size: 564*508*220mm. Temperature: -55~+125°C. Derated linearly to 75W@120°C.

2000W, N / 7/16 DIN

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			20	30	40	50		
QFA022K-2-X-7F	DC~0.7	2000	-	±1.0	±1.0	±1.0	1.2	7/16 DIN (f)
QFA022K-2-X-NF	0.7~2	2000	-	-	-	-	1.3	N (f)

'X' in the above table represents attenuation (dB). Size: 840*330*840mm. Temperature: -40~+45°C.

3000W, 7/16 DIN & N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)	VSWR (max.)	Connector
			50		
QFA033K-3-50-7NF	DC~3	3000	±3	1.40	7/16 DIN (m)-N (f)
QFA033K-3-50-7FNF	DC~3	3000	±3	1.40	7/16 DIN (f)-N (f)

Size: 781.5*351*200mm. Temperature: -55~+125°C.

Derated linearly to 300W@125°C. Peak Power: 10KW (5μS pulse width, 5% duty cycle).

4000W, 7/16 DIN & N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			20	30	40	50		
QFA014K-1-X-7F	DC~0.5	4000	/	±1.0	±1.0	±1.0	1.25	7/16 DIN (f)
QFA014K-1-X-NF	0.5~1			/	/	/	1.40	N (f)

'X' in the above table represents attenuation (dB). Size: 840*330*840mm. Temperature: -40~+45°C. Peak Power: 100KW (10μS pulse width).

5000W, 7/16 DIN

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Connector
			20	30	40	50		
QFA015K-1-X-7F	DC~0.5	5000	/	±1.0	±1.0	±1.0	1.25	7/16 DIN (f)
QFA015K-1-X-7	0.5~1			/	/	/	1.40	7/16 DIN (m)

'X' in the above table represents attenuation (dB). Size: 905*340*930mm. Temperature: -40~+45°C. Peak Power: 100KW (1μS pulse width, 5% duty cycle).

Coaxial Fixed Attenuators (75Ω)

How To Order:

Q7AW-X-Y-Z

- Serial Number
- Stop Frequency (GHz)
- Connector Type (Customizable)
- Attenuation (dB)

Examples: To order a 75Ω coaxial fixed attenuator, DC~1GHz, 1W, attenuation 10dB, F male to F female, specify Q7A0101-1-10-F.

1W, F

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Impedance	Connector
			1/2/4/8	10	16	20	1/2/4/8/10/16/20		
Q7A0101-1-X-F	DC~1	1	±0.4	±0.5	±0.5	±1.0	1.1	75Ω	F

'X' in the above table represents attenuation (dB). Size: 50*18*20mm. Operating temperature: -55~+125°C.

Derated linearly to 0.2W@125°C. Peak Power: 0.5KW (5μS pulse width, 0.2% duty cycle).

1W, F/ N

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)				VSWR (max.)	Impedance	Connector
			10	20	30	40	10/ 20/ 30/ 40		
Q7A0101-1-X-FF-A	0.1~1	1	±0.5	±1.0	±0.5	-2.0	1.15	75Ω	F (f)
Q7A0101-1-X-FF-B	0.1~1	1	±0.5	±1.0	±0.5	-2.0	1.15	75Ω	F (f)
Q7A0101-1-X-N	0.1~1	1	±0.5	±1.0	±0.5	-2.0	1.15	75Ω	N

'X' in the above table represents attenuation (dB). F (f) A Size: 47.5*37*20mm, F (f) B Size: 59*37*20mm. Operating temperature: -55~+125°C.

Derated linearly to 0.2W@125°C. Peak Power: 0.5KW (5μS pulse width, 0.2% duty cycle).

2W, F/ N/ BNC

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Impedance	Connector
			10	20	30	10/20/30		
Q7A0302-1-X-F	DC~1	2	±0.4	±0.4	±0.4	1.15	75Ω	F
Q7A0302-1-X-N	DC~1	2	±0.4	±0.4	±0.4	1.15	75Ω	N
Q7A0302-1-X-B	DC~1	2	±0.4	±0.4	±0.4	1.15	75Ω	BNC
Q7A0302-3-X-F	DC~3	2	±0.4	±0.5	±0.6	1.25	75Ω	F
Q7A0302-3-X-N	DC~3	2	±0.4	±0.5	±0.6	1.25	75Ω	N
Q7A0302-3-X-B	DC~3	2	±0.4	±0.5	±0.6	1.25	75Ω	BNC

'X' in the above table represents attenuation (dB). Size: Φ20*70mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 0.5KW (5μS pulse width, 0.5% duty cycle).

5W, F/ N/ BNC

Part Number*	Frequency (GHz)	Average Power* (W@25°C)	Accuracy (dB) and Attenuation (dB)			VSWR (max.)	Impedance	Connector
			10	20	30	10/20/30		
Q7A0305-1-X-F	DC~1	5	±0.4	±0.4	±0.4	1.15	75Ω	F
Q7A0305-1-X-N	DC~1	5	±0.4	±0.4	±0.4	1.15	75Ω	N
Q7A0305-1-X-B	DC~1	5	±0.4	±0.4	±0.4	1.15	75Ω	BNC
Q7A0305-3-X-F	DC~3	5	±0.4	±0.5	±0.6	1.25	75Ω	F
Q7A0305-3-X-N	DC~3	5	±0.4	±0.5	±0.6	1.25	75Ω	N
Q7A0305-3-X-B	DC~3	5	±0.4	±0.5	±0.6	1.25	75Ω	BNC

'X' in the above table represents attenuation (dB). Size: Φ20*70mm. Operating temperature: -55~+125°C.

Derated linearly to 0.5W@125°C. Peak Power: 1KW (5μS pulse width, 0.5% duty cycle).

Waveguide Fixed Attenuators

Waveguide fixed attenuator, the attenuation is a fixed value, the attenuation curve fluctuates with the frequency, and the fluctuation range is accuracy.

Features: Low VSWR, High Accuracy, High Power; **Applications:** Wireless, Radar, Transmitter, Laboratory Test.

How To Order:

QWFAX-Y-Z

Waveguide Size
Power (W)
Attenuation (dB)

Examples: To order a waveguide fixed attenuator, WR-12, 40W, attenuation 30dB, specify QWFA12-40-30.

Part Number	Frequency (GHz)	Interface	Power (W)	Attenuation (dB)	VSWR (max.)
QWFA10-1-10	75~110	WR-10	1	10±1	1.25
QWFA12-40-30	60.5~91.9	WR-12	40	30	1.25
QWFA12-R5-10	60.5~91.9	WR-12	0.5	10±2.5	1.25
QWFA12-R5-20	60.5~91.9	WR-12	0.5	20±5	1.25
QWFA12-R5-30	60.5~91.9	WR-12	0.5	30	1.25
QWFA15-10	49.8~75.8	WR-15	-	10	1.3
QWFA15-20	49.8~75.8	WR-15	-	20	1.3
QWFA19-K15-50	39.2~59.6	WR-19	150	50	1.25
QWFA28-K1-10	26.3~40	WR-28	100	10	1.15
QWFA28-K1-20	26.3~40	WR-28	100	20	1.15
QWFA28-K1-30	26.3~40	WR-28	100	30	1.15
QWFA28-K1-40	26.3~40	WR-28	100	40	1.15
QWFA28-K1-50	26.3~40	WR-28	100	50	1.15
QWFA28-K1-60	26.3~40	WR-28	100	60	1.15
QWFA34-75-40	22~33	WR-34	75	40±1	1.2
QWFA34-K1-30	21.7~33	WR-34	100	30±1	1.3
QWFA34-K25-50	21.7~33	WR-34	250	50±1	1.3
QWFA42-60-30	18~26.5	WR-42	60	30±1.5	1.2
QWFA51-K16-40	14.5~22	WR-51	160	40±1	1.3
QWFA62-60-30	12.4~18	WR-62	60	30±1.5	1.2
QWFA90-60-30	8.2~12.4	WR-90	60	30±1.5	1.2
QWFA112-425-40	7.05~10	WR-112	425	40±1	1.2
QWFA159-60-30	4.9~7.05	WR-159	60	30±1.5	1.2
QWFA229-1K-40	3.3~4.9	WR-229	1000	40±1	1.2

Coaxial Manually Variable Attenuators

Coaxial manually variable attenuator, including rotary stepped attenuators and coaxial continuously variable attenuators. Adjust the attenuation by turning the knob or key manually.

Coaxial Rotary Stepped Attenuators

Coaxial rotary stepped attenuator, attenuation is adjusted manually according to step. Different scales or keys correspond to different attenuation. Its precision is higher than that of continuously variable attenuator.

Features: Low VSWR, High Attenuation Flatness; **Applications:** Wireless, Radar, Laboratory Test.

How To Order:

QSAV-W-X-Y-Z

- W: Serial Number
- X: Stop Frequency (GHz)
- Y: Maximum Attenuation (dB)
- Z: Connector Type / Power (W)

Examples: To order a coaxial manually variable attenuator, DC~6GHz, attenuation 0~60dB, 2W, SMA female, specify QSA06A-6-60-2-S.

QSA40, DC~40GHz, 0~9dB, 2W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA40-32-9-2-Z	DC~32	0~9/1	1.8	2	1.2	2	2.92mm, 3.5mm
QSA40-40-9-2-Z	DC~40		1.9	2.2	1.5		

QSA28, DC~28GHz, 0~90dB, 25W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA28-18-9-Y-Z	DC~18	0~9/1	1.6	1	0.8	2, 10	SMA, 3.5mm
QSA28-26.5-9-Y-Z	DC~26.5		1.7	1.8	1		
QSA28-28-9-10-Z	DC~28		1.75	1.8	1.5	10	
QSA28-18-70-Y-Z	DC~18	0~70/10	1.6	1	1.5 / 4%	2, 10	SMA, 3.5mm
QSA28-26.5-60-Y-Z	DC~26.5	0~60/10	1.75	1.8	1.5 / 4%	2, 10	SMA, 3.5mm
QSA28-8-90-Y-Z	0.1~8	0~90/10	1.6	1	1.5 / 4%	2, 10	SMA, 3.5mm
QSA28-12.4-90-Y-Z	0.1~12.4						
QSA28-18-90-Y-Z	0.1~18						
QSA28-18-70-25-Z	DC~18	0~70/10	1.6	1	1.5 / 4%	25	SMA, 3.5mm
QSA28-26.5-70-25-Z	DC~26.5		1.75	1.8	1.5 / 4%		
QSA28-28-70-25-Z	DC~28		1.75	1.8	2 / 5%		

QSA26A, DC~26.5GHz, 0~99dB, 10W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA26-8-69-Y-Z	DC~8	0~69/1	1.5	1.25	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 10	N, SMA, 3.5mm
QSA26-12.4-69-Y-Z	DC~12.4		1.6	1.5			
QSA26-18-69-Y-Z	DC~18		1.75	1.75			
QSA26-26.5-69-2-3	DC ~ 26.5		1.85	2	1.5 (0~9dB), 1.75 (10~19dB), 2 (20~49dB), 2.5 (50~69dB)	2	3.5mm
QSA26-8-99-2-Z	DC~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 / 3.5% (70~99dB)	2	N, SMA, 3.5mm
QSA26-12.4-99-2-Z	DC~12.4		1.5	1.5			
QSA26-18-99-2-Z	DC~18		1.75	1.5			
QSA26-8-99-10-Z	0.1~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 or 3.5% (70~99dB)	10	N, SMA, 3.5mm
QSA26-8-99-10-Z	0.1~12.4		1.6	1.5			
QSA26-12.4-99-10-Z	0.1~18		1.75	1.75			

QSA26B, DC~26.5GHz, 0~60dB, 25W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA26-26.5-60-25-S	DC~26.5	0~60/10	1.8	1.8	1.5 or 4%	25	SMA

QSA18A, DC~18GHz, 0~90dB, 25W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA18A-8-9-Y-S	DC~8	0~9/1	1.4	0.8	0.6	2, 10	SMA
QSA18A-12.4-9-Y-S	DC~12.4		1.5	1	0.8		
QSA18A-18-9-Y-S	DC~18		1.6	1.2	1		
QSA18A-8-90-Y-S	DC~8	0~90/10	1.4	1	1.5 (0~60dB), 2.5 / 3.5% (70~90dB)	2, 10	SMA
QSA18A-12.4-90-Y-S	DC~12.4		1.5	1.2			
QSA18A-18-90-Y-S	DC~18		1.6	1.5			
QSA18A-18-70-Y-S	DC~18	0~70/10	1.65	1	1.5 or 4%	25	SMA

QSA18B, DC~18GHz, 0~99dB, 5W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA18B-8-69-Y-S	DC~8	0~69/1	1.5	1	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 5	SMA
QSA18B-12.4-69-Y-S	DC~12.4		1.6	1.25			
QSA18B-18-69-Y-S	DC~18		1.75	1.5			
QSA18B-8-99-Y-S	0.1~8	0~99/1	1.5	1	0.5 (0~9dB@0.1~8GHz), 0.8(0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 / 3.5% (70~99dB)	2, 5	SMA
QSA18B-12.4-99-Y-S	0.1~12.4		1.6	1.25			
QSA18B-18-99-Y-S	0.1~18		1.75	1.5			

QSA18C, DC~18GHz, 0~99.9dB, 2W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA18C-8-99.9-Y-Z	DC~8	0~99.9/0.1	1.5	1.3	0.5 (0.1~0.9dB@DC~8GHz), 0.8 (1~9.9dB@DC~8GHz), 1 (1~9.9dB@8~18GHz), 1.5 (10~19dB), 2 (20~49dB), 2 .5 (50~69dB), 3 or 3.5% (70~99dB)	2	N, SMA, 3.5mm
QSA18C-12.4-99.9-Y-Z	DC~12.4		1.65	1.6			
QSA18C-18-99.9-Y-Z	DC~18		2	1.7			

QSA06A, DC~6GHz, 0~90dB, 10W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA06A-2.5-1-Y-Z	DC~2.5	0~1/0.1	1.25	0.5	0.2	2, 10	SMA, N
QSA06A-3-1-Y-Z	DC~3		1.3	0.5	0.2		
QSA06A-4.3-1-Y-Z	DC~4.3		1.35	0.75	0.3		
QSA06A-6-1-Y-Z	DC~6		1.4	1	0.3		
QSA06A-2.5-10-Y-Z	DC~2.5	0~10/1	1.25	0.4	0.4	2, 10	SMA, N
QSA06A-3-10-Y-Z	DC~3		1.3	0.5	0.5		
QSA06A-4.3-10-Y-Z	DC~4.3		1.35	0.75	0.5		
QSA06A-6-10-Y-Z	DC~6		1.4	1	0.5		
QSA06A-2.5-60-Y-Z	DC~2.5	0~60/10	1.25	0.4	0.5	2, 10	SMA, N
QSA06A-3-60-Y-Z	DC~3		1.3	0.5			
QSA06A-4.3-60-Y-Z	DC~4.3		1.35	0.75	0.5 (1~50dB), 0.8 / ±3% (50~60dB)		
QSA06A-6-60-Y-Z	DC~6		1.4	1			
QSA06A-2.5-90-Y-Z	DC~2.5	0~90/10	1.25	0.4	0.5 (1~50dB), ±3% (50~90dB)	2, 10	SMA, N
QSA06A-3-90-Y-Z	DC~3		1.3	0.5	0.5 (1~50dB), ±3.5% (50~90dB)		

QSA06B, DC~6GHz, 0~100dB, 10W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (max.)		Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
			SMA	N				
QSA06B-2.5-11-Y-Z	DC~2.5	0~11/0.1	1.3	1.45	1	0.2 (1dB), 0.4(2~11dB)	2, 10	SMA, N
QSA06B-3-11-Y-Z	DC~3		1.35	1.45	1.2			
QSA06B-4.3-11-Y-Z	DC~4.3		1.4	1.55	1.5	0.3 (1dB), 0.5(2~11dB)		
QSA06B-6-11-Y-Z	DC~6		1.55	1.6	1.8			
QSA06B-2.5-50-Y-Z	DC~2.5	0~50/1	1.3	1.35	1	0.5 (1~10dB), 0.8 / 3% (50~60dB)	2, 10	SMA, N
QSA06B-2.5-70-Y-Z	DC~2.5	0~70/1	1.3	1.45	1	0.5 (1~10dB), 0.8 / 3% (11~59dB), 1.5 / 3% (60~70dB)	2, 10	SMA, N
QSA06B-3-70-Y-Z	DC~3		1.35	1.45	1.2			
QSA06B-4.3-70-Y-Z	DC~4.3		1.4	1.55	1.5			
QSA06B-6-70-Y-Z	DC~6		1.55	1.6	1.8			
QSA06B-2.5-100-Y-Z	DC~2.5	0~100/1	1.3	1.45	1	0.5 (1~10dB), 0.8 / 3% (11~59dB), 1.5 / 3% (60~69dB), ±3.5% (70~100dB)	2, 10	SMA, N
QSA06B-3-100-Y-Z	DC~3		1.35	1.45	1.2			

QSA06C, DC~6GHz, 0~100dB, 10W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA06C-2.5-11-Y-N	DC~2.5	0~11/0.1	1.4	1.2	0.3 (1dB), 0.5 (2~11dB)	2, 10	N
QSA06C-3-11-Y-N	DC~3		1.45	1.2			
QSA06C-4.3-11-Y-N	DC~4.3		1.5	1.5			
QSA06C-6-11-Y-N	DC~6		1.65	1.8			
QSA06C-2.5-70-Y-N	DC~2.5	0~70/1	1.4	1.2	0.8 / 3% (0~60dB), 1.5 / 3% (61~70dB)	2, 10	N
QSA06C-3-70-Y-N	DC~3		1.45	1.2			
QSA06C-4.3-70-Y-N	DC~4.3		1.5	1.5			
QSA06C-6-70-Y-N	DC~6		1.65	1.8			
QSA06C-2.5-100-Y-N	DC~2.5	0~100/1	1.4	1.2	0.8 / 3% (0~59dB), 1.5 / 3% (60~69dB), ±3.5% (70~100dB)	2, 10	N
QSA06C-3-100-Y-N	DC~3		1.45	1.2			

QSA06D, DC~6GHz, 0~101dB, 10W

Part Number	Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	Insertion Loss (dB, Max.)	Accuracy (±dB)	Power (W)	Connector
QSA06D-2.5-71-Y-N	DC~2.5	0~71/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (71dB)	2, 10	N
QSA06D-3-71-Y-N	DC~3		1.6	1.7			
QSA06D-4.3-71-Y-N	DC~4.3		1.7	2			
QSA06D-6-71-Y-N	DC~6		1.75	2.5			
QSA06D-2.5-101-Y-N	DC~2.5	0~101/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (61~70dB), ±3.5% (70~101dB)	2, 10	N
QSA06D-3-101-Y-N	DC~3		1.6	1.7			

Coaxial Continuously Variable Attenuators

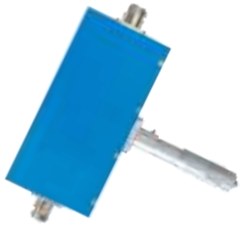
Coaxial continuously variable attenuators, adjust the attenuation by turning the knob manually. Theoretically, any attenuation can be adjusted within the nominal range.

Features: Low VSWR, High Attenuation Flatness; **Applications:** Wireless, Radar, Laboratory Test.

How To Order:

QCAV-W-X-Y-Z

- Power (W)
- Start Frequency (GHz)
- Stop Frequency (GHz)
- Connector Type
- Maximum Attenuation (dB)



Examples: To order a coaxial continuously variable attenuator, 75W, 2.9~3.1GHz, attenuation 0~10dB, N Female, specify QCA75-2.9-3.1-10.

* The 'W' and 'X' in the following table represent the frequency range. Only 100MHz and 200MHz bandwidth is provided.

Part Number	Frequency (GHz)	Attenuation Range (dB)	Power (W)	Connector	Size (mm)
QCA1-0-2.5-10-N QCA1-0-2.5-16-N	DC~2.5	0~10 0~16	1	N	47.5*42*20
QCA1-0-2.5-10-S QCA1-0-2.5-16-S	DC~2.5	0~10 0~16	1	SMA	41*38*20
QCA10-0.5-4-20	0.5~4	0~20	10	N	148*170*19
QCA50-W-X-10-N	0.9~4	0~10	50	N	120*96.5*75
QCA75-W-X-10-N QCA75-W-X-15-N	0.9~4	0~10 0~15	75	N	134.4*98*75
QCAK1-W-X-10-N QCAK1-W-X-12-N QCAK1-W-X-15-N QCAK1-W-X-20-N	0.9~10.5	0~10 0~12 0~15 0~20	100	N	190*102*75
QCAK3-W-X-10-N QCAK3-W-X-12-N QCAK3-W-X-15-N QCAK3-W-X-25-N	0.9~10.5	0~10 0~12 0~15 0~25	300	N	259*102*75
QCA10-2-18-40-S QCA10-2-18-40-N	2~18	0~40	10	SMA N	148*170*21

Waveguide Manually Variable Attenuators

Waveguide manually variable attenuator, including waveguide manually stepped attenuators and waveguide continuously variable attenuators. Adjust the attenuation by turning the knob manually.

Waveguide Continuously Variable Attenuators

Waveguide continuously variable attenuator, attenuation can be adjusted by knob. Theoretically, any attenuation can be adjusted within the nominal range.

Features: Low VSWR, High Attenuation Flatness; **Applications:** Wireless, Radar, Laboratory Test.

How To Order:

QWVA-X

Waveguide Size

Examples: To order a waveguide continuously variable attenuator, WR-12, specify QWVA-10.

Part Number	Frequency (GHz)	Interface	Attenuation Range (dB)	Insertion Loss (dB, max.)	VSWR (max.)
QWVA-10	75~110	WR-10	0~30	0.5	1.4
QWVA-12	60.5~91.5	WR-12	0~30	0.5	1.4
QWVA-15	49.8~75.8	WR-15	0~30	-	1.3

Digitally Controlled Attenuators

The digitally control attenuator uses the code to control the electronic switches of all levels to realize the step or superposition of attenuators as required.

Features: Broadband, High Dynamic Range, Customization on Demand; **Applications:** Wireless, Radar, Laboratory Test.

How To Order:

QDA-W-X-Y-Z

- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Step (dB)
- Z: Maximum Attenuation (dB)

Examples: To order a digitally control attenuator, 1~2GHz, attenuation range 0~30dB, step 0.5dB, specify QDA-1000-2000-30-0.5.

Part Number	Frequency (GHz)	Attenuation Range (dB)	Control Bits (bit)	Step (dB)	Accuracy (±dB)	Insertion Loss (dB, max.)	VSWR	Switching Time (nS, max.)	Input Power (dBm, max.)
QDA-0-6000-30-1	DC~6	0~30	-	1	3~5%	2	1.5	-	20
QDA-0-18000-11-1	DC~18	0~11	-	1	1	0.6+0.09/GHz	1.75	-	30
QDA-0-18000-110-10	DC~18	0~110	-	10	4.5	0.6+0.09/GHz	1.75	-	30
QDA-9K-20000-31.5-0.5	9K~20	0~31.5	-	0.5	1 typ.	6	2	-	25
QDA-0.1-5000-110-1	0.0001~5	0~110	7	1	3	8	2.5	500	30
QDA-1-4000	0.001~4	0~60	-	0.25	0.03	5	1.8	200	27
QDA-10-13000-40-10	0.01~13	0~40	4	10	0.03	7	1.5	100	37
QDA-10-18000-63.75-0.25	0.01~18	0~63.75	8	0.25	2	6	2.5	-	-
QDA-10-18000-63.5-0.5	0.01~18	0~63.5	7	0.5	2	5	2.5	-	-
QDA-10-18000-63-1	0.01~18	0~63	6	1	2	5	2.5	-	-
QDA-10-18000-31.5-0.5	0.01~18	0~31.5	6	0.5	2	3.5	2.5	-	-
QDA-10-20000-63.75-0.25	0.01~20	0~63.75	8	0.25	2	6.5	2.5	-	-
QDA-20-6000-31.5-0.5	0.02~6	0~31.5	-	0.5	0.5 typ.	6	2	-	25
QDA-20-18000-31.5-0.5	0.02~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-20-20000-31.5-0.5	0.02~20	0~31.5	-	0.5	1 typ.	6	2	-	25
QDA-50-4000-31-1	0.05~4	0~31	5	1	0.5 typ.	3	1.8	1000	24
QDA-100-18000-32-0.03	0.1~18	0~32	10	0.03	2	4.7	2.5	-	-
QDA-100-40000-32-0.03	0.1~40	0~32	10	0.03	2	6	2.5	-	-
QDA-100-40000-31-1	0.1~40	0~31	5	1	2	9	2.2	-	-
QDA-100-18000-31.5-0.5	0.1~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-100-40000-31.5-0.5	0.1~40	0~31.5	-	0.5	2 typ.	7	2	-	25
QDA-108-400-31-1	0.108~0.4	0~31	-	1	0.03	2.5	2	500	-
QDA-500-18000-31.5-0.5	0.5~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-500-18000-62-2	0.5~18	0~62	5	2	0.03	9	2	100	27
QDA-500-40000-31.5-0.5	0.5~40	0~31.5	-	0.5	2	7	2	-	25
QDA-500-40000-63.5-0.5	0.5~40	0~63.5	-	0.5	2	11.5	1.7	-	25
QDA-1000-2000-31.5-0.5	1~2	0~31.5	-	0.5	0.5 typ.	3.6	1.8	-	25
QDA-1000-2000-47.5-0.5	1~2	0~47.5	7	0.5	0.03	3.5	1.5	100	27
QDA-1000-2000-63-1	1~2	0~63	6	1	0.03	2.5	1.5	100	30
QDA-1000-2000-63.5-0.5	1~2	0~63.5	-	0.5	1.5	5	1.7	-	25
QDA-1000-2000-63.75-0.25	1~2	0~63.75	8	0.25	1.5	1.5	1.5	-	-
QDA-1000-12000	1~12	0~60	-	0.25	0.03	6	2	200	27
QDA-1000-18000-31.5-0.5	1~18	0~31.5	-	0.5	1	5.5	2	-	25
QDA-1000-18000-31.5-0.5-1	1~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-1000-18000-127-0.5	1~18	0~127	8	0.5	2.5	8	2.5	-	-
QDA-1000-20000-63.5-0.5	1~20	0~63.5	-	0.5	3	7	1.8	-	25
QDA-1000-40000-31-1	1~40	0~31	5	1	0.05	8	2	-	27
QDA-1000-40000-63.5-0.5	1~40	0~63.5	-	0.5	2	11.5	2	200	25
QDA-2000-4000-63.75-0.25	2~4	0~63.75	8	0.25	1.5	2	1.5	-	-
QDA-2000-4000-31.5-0.5	2~4	0~31.5	-	0.5	0.5 typ.	3.8	1.8	-	25
QDA-2000-10000-60-0.1	2~10	0~60	-	0.1	-	7	2	-	25
QDA-2000-18000	2~18	0~60	-	0.25	0.04	6	2	200	27
QDA-2000-18000-15-1	2~18	0~15	4	1	0.04	7	2.2	500	20
QDA-2000-18000-31.5-0.5	2~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-2000-18000-60-0.1	2~18	0~60	-	0.1	0.05	6	2	-	20
QDA-2000-18000-60-10	2~18	0~60	3	10	0.04	14	2.2	500	20
QDA-2000-40000-31.5-0.5	2~40	0~31.5	-	10	2	7	2	1000	25
QDA-4000-8000-31.5-0.5	4~8	0~31.5	-	0.5	0.8 typ.	4.2	1.8	-	25

Part Number	Frequency (GHz)	Attenuation Range (dB)	Control Bits (bit)	Step (dB)	Accuracy (±dB)	Insertion Loss (dB, max.)	VSWR	Switching Time (nS, max.)	Input Power (dBm, max.)
QDA-4000-8000-63.75-0.25	4~8	0~63.75	8	0.25	2	2.5	1.8	-	-
QDA-4000-32000-31.5-0.5	4~32	0~31.5	-	0.5	2	5.5	2	1000	25
QDA-4000-32000-63.5-0.5	4~32	0~63.5	-	0.5	2	10	2	200	25
QDA-6000-18000-31.5-0.5	6~18	0~31.5	-	0.5	1 typ.	5.5	2	-	25
QDA-6000-26500	6~26.5	0~60	-	0.5	0.04	8	2.5	200	27
QDA-7000-9000-32-0.25	7~9	0~32	-	0.25	2	5.5	2	-	24
QDA-8000-12000-31-1	8~12	0~31	5	1	0.02	3.5	1.5	100	27
QDA-8000-12000-31.5-0.5	8~12	0~31.5	-	0.5	0.8 typ.	4.7	2	-	25
QDA-8000-12000-63.75-0.25	8~12	0~63.75	8	0.25	2	2.8	1.8	-	-
QDA-8000-12000-101.5-0.5	8~12	0~101.5	-	0.5	0.4+5%	21	2	200	25
QDA-8000-12000-110-10	8~12	0~110	4	10	3~5%	8	1.5	-	20
QDA-8000-18000-63-1	8~18	0~63	6	1	0.05	8	2	100	27
QDA-8000-18000-63.75-0.25	8~18	0~63.75	-	0.25	1.5	7.5	2	-	25
QDA-8000-18000-70-1	8~18	0~70	7	1	0.05	11	2	100	27
QDA-8200-12400-61-1	8.2~12.4	0~61	6	1	0.04	7	2.2	500	30
QDA-8500-9500-31.5-0.25	8.5~9.5	0~31.5	-	0.25	3~5%	5.5	2	-	30
QDA-9000-10000-47.5-0.5	9~10	0~47.5	7	0.5	0.03	5.5	1.8	100	27
QDA-12000-18000-63.75-0.25	12~18	0~63.75	8	0.25	2.5	3.7	2.5	-	-
QDA-18000-26000-47.5-0.5	18~26	0~47.5	8	0.5	0.03	9	2.5	100	27
QDA-18000-40000	18~40	0~60	-	0.5	0.06	9	2.5	200	27
QDA-18000-40000-31.5-0.5	18~40	0~31.5	6	0.5	0.06	8	2.5	500	27
QDA-18000-40000-50-0.05	18~40	0~50	10	0.05	2	9	2.5	-	-
QDA-26000-40000-51.5-0.5	26~40	0~51.5	7	0.5	0.05	15	2.5	100	27
QDA-30000-40000-30-0.5	30~40	0~30	-	0.5	3~5%	5.5	1.5	-	25
QDA-35000-40000-60-0.5	35~40	0~60	7	0.5	-	15	1.5	-	15

Voltage Controlled Attenuators

The voltage controlled attenuator is a dual port component that adjusts the signal amplitude between the input and output ports by controlling the DC bias.

Features: Broadband, High Dynamic Range, Customization on Demand; **Applications:** Wireless, Transmitter, Laboratory Test, Radar.

How To Order:

QVA-W-X-Y-Z

- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Maximum Attenuation (dB)
- Z: Connector Type

Examples: To order a voltage controlled attenuator, 0.5~18GHz, attenuation range 0~20dB, SMA, specify QVA-500-18000-20-S.

The sizes in the following table do not include connectors.

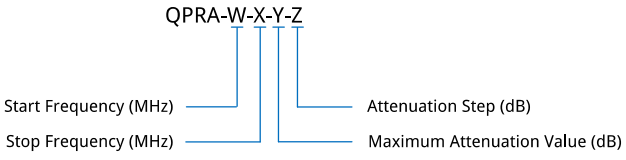
Part Number	Frequency (GHz)	Attenuation Range (dB)	Attenuation Flatness (dB)	VSWR (typ.)	Flatness (dB)	Voltage (V)	Connector	Size* (mm)
QVA-500-1000-64-S	0.5-1	0~64	1.5	2	±2.5	0~+10	SMA	-
QVA-500-18000-20-S	0.5~18	0~20	3	2.2	±1.5	0~5	SMA	25*20*9
QVA-1000-2000-64-S	1~2	0~64	1.3	1.5	±2	0~+10	SMA	-
QVA-2000-4000-64-S	2~4	0~64	1.5	1.5	±2	0~+10	SMA	-
QVA-4000-8000-64-S	4~8	0~64	2	1.8	±2	0~+10	SMA	-
QVA-5000-30000-33-K	5~30	0~33	2.5	2	-	-5~0	2.92mm	25*18*9
QVA-8000-12000-64-S	8~12	0~64	2.5	1.8	±2	0~+10	SMA	-
QVA-12000-18000-64-S	12~18	0~64	3	2	±2.5	0~+10	SMA	-
QVA-18000-40000-3-K	18-40	0~30	6	2.5	±1.5	0~+10	2.92mm	-

Programmable Attenuators

Programmable attenuators, can be controlled through software, with control interfaces including USB, Ethernet, serial ports, etc., and are typically used in automated testing environments.

Features: Broadband, High Dynamic Range, Customization on demand; **Applications:** Wireless, Radar, Laboratory Test.

How To Order:



Examples: To order a programmable attenuator, 0.02~18GHz, attenuation range 0~63.75dB, step 0.25dB, specify QPRA-20-18000-63.75-0.25.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Attenuation Range (dB)	Step (dB, min.)	Accuracy (+/-)	Insertion Loss (dB, max.)	VSWR (typ.)	Switching Time (nS, max.)	Input Power (dBm, max.)
QPRA-20-18000-63.75-0.25	0.02~18	0~63.75	0.25	±2dB	8	2	-	25
QPRA-500-40000-63.5-0.5	0.5~40	0~63.5	0.5	±2dB	12	2	-	25

Baluns

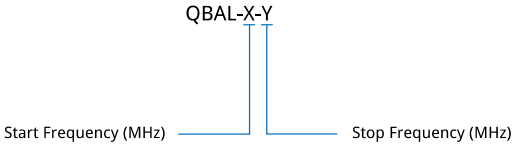
Qualwaves supplies baluns with different type to meet the needs of customers.

Baluns

Balun is a type of transformer, whose main function is to complete impedance conversion and balance to unbalance conversion.

Features: Broadband, High Rejection; **Applications:** Analog to Digital Conversion, Balanced Receiver, Baseband Digital Modulation, Signal Integrity.

How To Order:



Examples: To order a balun, 0.01~26.5GHz, specify QBAL-10-26500.

Part Number	Frequency (GHz)	Insertion Loss (dB, max.)	Amplitude Balance (dB, max.)	Phase Balance (°, max.)	Common Mode Rejection (dB, min.)	VSWR (typ.)	Input Power (W, max.)	Group Delay (ps, typ.)
QBAL-100K-67000	100K~67	10.8	±1.0	±6.5	28	1.4	1	286±5.0
QBAL-500K-6000	500K~6	6	±1.2	±10.0	20	1.5	1	-
QBAL-10-26500	0.01~26.5	10.2	±1.0	±5.0	28	1.25	1	294±4.0
QBAL-10-40000	0.01~40	10.4	±1.0	±6.0	28	1.3	1	292±5.0
QBAL-10-50000	0.01~50	10.6	±1.0	±6.0	28	1.3	1	290±5.0
QBAL-10-67000	0.01~67	10.8	±1.0	±6.5	28	1.4	1	286±5.0
QBAL-10-90000	0.01~90	11	±1.0	±7.0	27.5	1.45	1	-
QBAL-10-110000	0.01~110	11.5	±1.1	±8.0	27	1.5	1	-

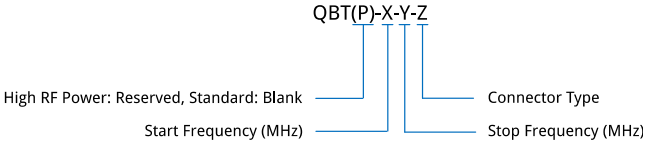
Bias Tees

Qualwave supplies bias tees with different connectors to meet the needs of customers.

The bias tee is mainly used to inject DC current or voltage into the RF circuit without affecting the RF signal passing through the main transmission path. Qualwave supplies different connectors bias tees in a range from 5MHz~40GHz.

Features: Broadband, Small Size; **Applications:** Telecom, Satcom, Laboratory Test, Instrumentation.

How To Order:



Examples: To order a bias tee, 5~700MHz, SMA, specify QBT-5-700-S.

Standard Bias Tees

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Voltage (V)	Average Power (W)	Connectors				Size* (mm)
						RF Input	RF Output	DC Input	DC Output	
QBT-50K-18000	50K ~ 18	2	1.8	25	10	SMA (f)	SMA (f)	Pin	Pin	15*25*14
QBT-50K-40000	50K ~ 40	3	1.8	25	10	2.92mm (f)	2.92mm (f)	Pin	Pin	15*25*14
QBT-0.1-6000	100K ~ 6	1.5	1.5	0~50	1	SMA (m)	SMA (f)	Pin	Pin	15*20*13
QBT-10-2500	0.01 ~ 2.5	0.6	1.8	0~60	-	SMA (f)	SMA (f)	Pin	Pin	42*36*12
QBT-10-4200-S-01	0.01 ~ 4.2	1.25	1.25	72	5	SMA (m)	SMA (f)	Pin	Pin	30*30*15.5
QBT-10-4200-S-02	0.01 ~ 4.2	1.25	1.25	72	5	SMA (m)	SMA (f)	SMA (f)	SMA (f)	30*30*15.5
QBT-10-4200-N-01	0.01 ~ 4.2	1.25	1.25	72	5	N (m)	N (f)	Pin	Pin	30*32*20
QBT-10-4200-N-02	0.01 ~ 4.2	1.25	1.25	72	5	N (m)	N (f)	N (f)	N (f)	30*32*20
QBT-10-6000	0.01 ~ 6	1.25	1.5	100	5	-	-	-	-	-
QBT-10-12000	0.01 ~ 12	3	2	100	5	-	-	-	-	-
QBT-10-40000	0.01 ~ 40	2.2	2	25	10	2.92mm (f)	2.92mm (f)	Pin	Pin	16*12*10
QBT-100-6000-S	0.1 ~ 6	1.5	1.5	50	1	SMA (m)	SMA (f)	Pin	Pin	20*15*13
QBT-5000-20000	5 ~ 20	0.7	2	10	-	SMA (m)	SMA (f)	Pin	Pin	14.7*14.7*9.1
QBT-18000-40000	18 ~ 40	2	2	10	-	2.92mm (m)	2.92mm (f)	Pin	Pin	15*16*9
QBT-24900-25100	24.9 ~ 25.1	0.8	2	9~30	1	2.92mm (f)	2.92mm (f)	Pin	Pin	15*13*9

High RF Power Bias Tees

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Voltage (V)	Average Power (W)	Connectors				Size* (mm)
						RF Input	RF Output	DC Input	DC Output	
QBTP-5-700-S	0.005 ~ 0.7	0.5	1.8	0~48	150	SMA (m)	SMA (f)	Pin	Pin	40*20*13
QBTP-200-12000-S	0.2 ~ 12	0.6	1.8	0~36	10	SMA (f)	SMA (f)	Pin	Pin	30*20*12
QBTP-9000-11000-S	9 ~ 11	0.5	2	28	50	SMA (m)	SMA (f)	Pin	Pin	14.7*14.7*9.1
QBTP-18000-40000-K	18 ~ 40	1.2	2	50	30	2.92mm (m)	2.92mm (f)	Pin	Pin	14.7*14.7*9.1

Cables And Cable Assemblies

Qualwave offers various RF Cables and RF Cable Assemblies to meet different requirements. Frequency range is from DC to 110GHz. Low insertion loss, high power handling, light weighted, and long life.

How To Order QTV Series:

QTV-X-Y-Z

Code of Connector A
(Note: see the chapter of cable connectors for the code)
Code of Connector B

Length (m)

Examples: To order a pair of VNA test cable assemblies, DC-50GHz, 0.6 meter, specify QTV-M2F-M2-0.6 and QTV-M2F-2F-0.6.

How To Order Other Series:

W-X-Y-Z

Cables
Stop Frequency (GHz)

Length (m)
Code of two Connectors
(Note: see the chapter of cable connectors for the code)

Examples: To order a QT67 test cable assembly with armor, DC-60GHz,1.85mm male to 1.85mm female, 0.5 meter, specify QT67P-60-VVF-0.5.

QT-Test Cables

QTV series is high precision test cable, especially used for VNA with frequency up to 67GHz. The low loss, amplitude and phase stabilized cable makes it highly precise. Its special armor design ensures its compression resistance, tension resistance and torsion resistance.

QTV series is high precision test cable especially used for VNA with frequency up to 67GHz.

QT series is high performance test cable with features of frequency up to 110GHz, Phase & Loss Stable and Long Flex Life.

The biggest feature of QTE test cable is low price.

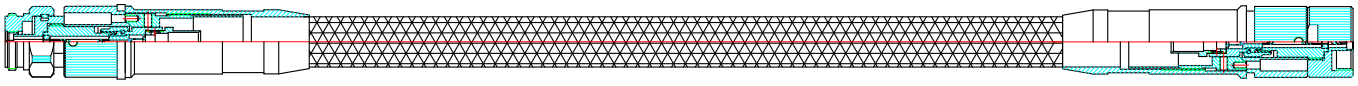
The biggest feature of QTF test cable is ultra-flexible.

QTV:

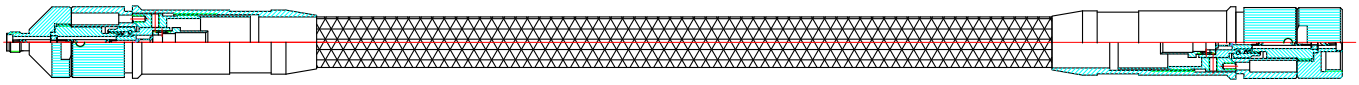
QT50P:

QT50:

QTV - VNA Test Cables



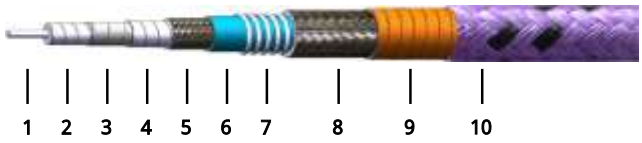
NMD Male NMD Female



Female NMD Female

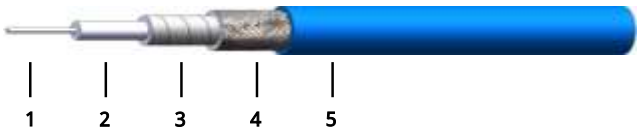
Cable	Frequency (GHz)	Bend Radius (mm)	VSWR (max.)	Phase Stability (±°)	Amplitude Stability (±dB)	Insertion Loss (dB)		
						0.6m	0.8m	1m
QTV-V	DC~67	50	1.5	10	0.13	4.91	6.11	7.31
QTV-2	DC~50	50	1.42	8	0.10	3.17	3.85	4.53
QTV-K	DC~40	50	1.35	6	0.10	2.78	3.37	3.96
QTV-3	DC~26.5	50	1.3	5	0.06	2.23	2.70	3.17
QTV-N	DC~18	50	1.3	4	0.05	1.58	1.88	2.18

QT - High Performance Test Cable Construction



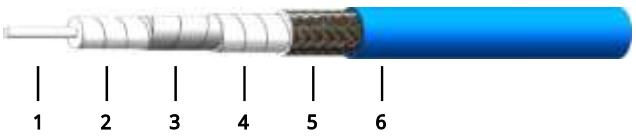
Number	Name	Material	Size (mm)					
			QT110	QT110P	QT67	QT67P	QT50	QT50P
1	Inner Conductor	Silver-plated copper	0.31	0.31	0.50	0.50	0.72	0.72
2	Dielectric	Low density PTFE	0.88	0.88	1.38	1.38	2.10	2.10
3	Inner Shield	Silver-plated copper tape	1.00	1.00	1.54	1.54	2.25	2.25
4	Interlayer	Low density PTFE	1.20	1.20	1.82	1.82	2.55	2.55
5	Outer Shield	Silver-plated copper braid	1.45	1.45	2.17	2.17	3.01	3.01
6	Jacket	FEP	1.85	1.85	2.40	2.40	3.60	3.60
7~9	Armor (optional)	Composite		2.70		5.50		5.50
10		PTFE		3.84		6.00		6.00

QTE - Economincal Test Cables Construction



Number	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	3.00	PTFE
3	Inner Shield	3.20	Silver-plated copper tape
4	Outer Shield	3.55	Silver-plated copper braid
5	Jacket	4.00	FEP

QTF - Ultra-Flexible Test Cables Construction



Number	Name	Size (mm)	Material
1	Inner Conductor	1.02	Silver plated copper
2	Dielectric	3.07	Low density PTFE
3	Inner Shield	3.27	Silver-plated copper tape
4	Interlayer	3.55	PTFE
5	Outer Shield	4.12	Silver-plated copper braid
6	Jacket	5.20	PUR

Specifications

Feature	Cable	Frequency (GHz)	Outer Diameter (mm)	Shielding Effectiveness (dB, min.)	Phase/ Amplitude *1 (±° / ±dB)	Installation / Repeated Bend Radius (mm, min.)	Armor	Bending / Mating Life Cycle	Temperature (°C)
High Performance	QT110 QT110P	DC~110	1.85 3.84	90	- / -	10 / 20 30 / 50	- Armored	50k / -	-55~+125
High Performance	QT67 QT67P	DC~67	2.4 6	90	7 / 0.05	12 / 24 30 / 60	- Armored	100k / 5k	-55~+125
Hot High Performance	QT50 QT50P	DC~50	3.6 6	90	7 / 0.05	18 / 36 30 / 60	- Armored	100k / 5k	-55~+125
Ultra-flexible	QTF	DC~26.5	5.2	90	- / -	20.8 / 52	-	- / -	-55~+85
Economic	QTE	DC~18	4	90	- / -	20 / 40	-	- / -	-55~+125

[1] 50mm Radius, 360°bending

Attenuation & Power Handling

Attenuation*1 and Power Handling*2	Frequency (G) / Cable	1	3	6	10	12.4	18	26.5	40	50	67	110	Coefficient K
Attenuation (dB/100m)	QT110(P)	114	199	283	368	412	500	612	760	857	1003	1314	K1=3.557846
Average Power (W)		102	58	41	31	28	23	19	15	13	11	8	K2=0.0012207
Attenuation (dB/100m)	QT67(P)	64	112	161	210	236	288	355	445	503	594	-	K1=1.975832
Average Power (W)		97	54	38	29	25	21	17	14	12	10	-	K2=0.001221
Attenuation (dB/100m)	Hot QT50(P)	48.1	83.9	119.4	155.2	173.4	210.2	257.1	319.2	359.2	-	-	K1=1.507808
Average Power (W)		506	290	204	157	140	116	95	76	68	-	-	K2=0.000440
Attenuation (dB/100m)	QTF	38.5	69.8	103.2	139.0	157.9	198.0	252.1	-	-	-	-	K1=1.136600
Average Power (W)		149	82	55	41	36	29	23	-	-	-	-	K2=0.002530
Attenuation (dB/100m)	QTE	38.2	71.1	107.5	147.6	169.4	216.1	-	-	-	-	-	K1=1.082677
Average Power (W)		290	156	103	75	65	51	-	-	-	-	-	K2=0.003937

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

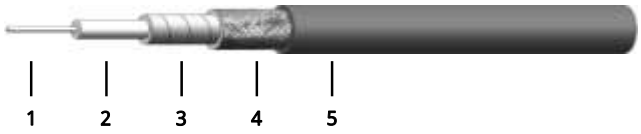
Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QA-Ultra Low Loss & Phase Stable, Flexible Cables

QA sereis high-performance cable, with low loss and high power features, has good temperature vs. phase stability (750 PPM@-55~+85°C, max.) up to 50GHz. It is suitable for avionics, phased-array radar, satellite communication and other fields.

Construction



Number	Name	Material
1	Inner Conductor	Silver-plated copper (QA760 is Stranded silver-plated copper)
2	Dielectric	Low density PTFE
3	Inner Shield	Silver-plated copper tape
4	Outer Shield	Silver-plated copper braid
5	Jacket	PFA

Cable	Size (mm)				
	Inner Conductor	Dielectric	Inner Shield	Outer Shield	Jacket
QA150	0.30	0.88	1.00	1.23	1.50
Hot QA220	0.50	1.38	1.54	1.95	2.20
QA300	0.70	1.93	2.09	2.66	3.10
Hot QA360	0.91	2.50	2.66	3.11	3.60
QA400	1.05	2.85	3.05	3.40	4.00
QA480	1.40	3.80	3.95	4.35	4.80
Hot QA500	1.45	3.99	4.19	4.60	5.20
QA550	1.60	4.30	4.50	5.10	5.60
QA750	2.10	5.70	5.95	6.60	7.40
QA760	2.39	6.25	6.49	7.06	7.65
Hot QA800	2.30	6.20	6.44	7.05	7.90
QA810	2.40	6.36	6.60	7.10	8.10
QA830	2.44	6.50	6.90	7.65	8.30

Attenuation & Power Handling (Multi-channel cable assemblies are available for QA220 series.)

Specifications \ Cable	QA150	QA220	QA300	QA360	QA400	QA480	QA500	QA550	QA750	QA760	QA800	QA810	QA830
Frequency (GHz)	40	50	50	40	40	26.5	26.5	18	18	18	18	18	18
Cut-off Frequency (GHz)	128	83	60	48	41	31	29	27	20	19	19	18	18
Impedance (Ω)	50												
Velocity of Propagation (%)	80	81	82	82	82	83	83	83	83	83	83	83	83
Shielding Effectiveness (dB)	> 90												
Voltage Withstand (V DC)	400	400	500	500	1500	1500	1500	2000	2500	2500	2500	2500	2500
PIM (dBc)	-155												
Phase Stability (PPM@-55~+85°C)	< 1000	< 750											
Outer Diameter (mm)	1.50	2.20	3.10	3.60	4.00	4.80	5.20	5.60	7.40	7.65	7.90	8.10	8.30
Installation Bend Radius (mm)	8.0	8.8	15.0	18.0	20.0	24.0	26.0	28.0	37.0	38.0	39.0	40.0	41.0
Repeated Bend Radius (mm)	15.0	22.0	31.0	36.0	40.0	48.0	52.0	56.0	74.0	76.0	79.0	81.0	83.0
Weight (g/m)	5.4	16	29	33	36	58	67	93	125	137	130	140	162
TEMP. (°C)	-55~+125		-55~+165										

Attenuation & Power Handling (Multi-channel cable assemblies are available for QA220 series.)

Attenuation*1 and Power Handling*2	Frequency (G) / Cable	0.3	1	2	6	12.4	18	26.5	40	50	Coefficient K
Attenuation (dB/100m)	QA150	62.0	113.7	161.6	282.9	411.3	499.3	611.5	760.4	-	K1=3.557846
Average Power (W)		177	97	68	39	27	22	18	15	-	K2=0.001221
Attenuation (dB/100m)	Hot QA220	34.6	63.7	90.8	160.4	235.2	287.1	354	444	502.8	K1=1.975832
Average Power (W)		178	97	68	38	26	21	17	14	12	K2=0.001221
Attenuation (dB/100m)	QA300	25.5	46.8	66.6	117.1	170.8	207.9	255.4	318.9	360.1	K1=1.458470
Average Power (W)		749	407	286	163	111	92	75	60	53	K2=0.000680
Attenuation (dB/100m)	Hot QA360	20.4	37.5	53.4	93.9	136.9	166.7	204.8	255.7	-	K1=1.168470
Average Power (W)		936	509	358	203	139	115	93	75	-	K2=0.000550
Attenuation (dB/100m)	QA400	18.4	33.5	47.5	82.8	119.7	144.7	176.4	218.1	-	K1=1.054470
Average Power (W)		1159	634	447	257	178	147	121	98	-	K2=0.000180
Attenuation (dB/100m)	QA480	13.1	24.1	34.3	60.1	87.6	106.6	130.8	-	-	K1=0.750400
Average Power (W)		1689	919	644	368	252	207	169	-	-	K2=0.000328
Attenuation (dB/100m)	Hot QA500	12.8	23.5	33.3	58.6	85.4	103.9	127.6	-	-	K1=0.730000
Average Power (W)		1688	919	646	368	251	207	169	-	-	K2=0.000328
Attenuation (dB/100m)	QA550	12.2	22.3	31.6	55.0	79.5	96.1	-	-	-	K1=0.701472
Average Power (W)		1873	1024	722	415	287	237	-	-	-	K2=0.000110
Attenuation (dB/100m)	QA750	8.6	15.8	22.5	39.1	56.6	68.5	-	-	-	K1=0.496490
Average Power (W)		3186	1740	1223	704	486	401	-	-	-	K2=0.000104
Attenuation (dB/100m)	QA760	9.8	18	25.7	45.3	66.3	80.9	-	-	-	K1=0.559764
Average Power (W)		2952	1604	1126	638	436	357	-	-	-	K2=0.000320
Attenuation (dB/100m)	Hot QA800	8.0	14.8	21.1	37.3	54.8	67.0	-	-	-	K1=0.456300
Average Power (W)		3341	1812	1270	717	487	399	-	-	-	K2=0.000320
Attenuation (dB/100m)	QA810	7.4	13.7	19.5	34.8	51.5	63.3	-	-	-	K1=0.419490
Average Power (W)		3503	1894	1324	742	502	409	-	-	-	K2=0.000389
Attenuation (dB/100m)	QA830	7.2	13.3	18.9	33.6	49.5	60.6	-	-	-	K1=0.408997
Average Power (W)		3498	1894	1326	747	507	414	-	-	-	K2=0.000320

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

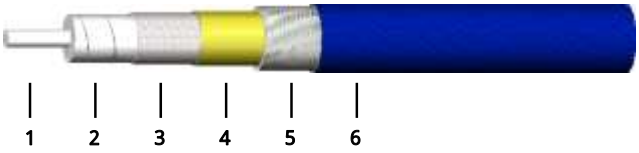
Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QB-Stable Loss, Phase vs Flexing, Flexible Cables

QB1200 & QB1500 have large outer diameter, low insertion loss, high power and bending durable features. They are used to all kinds of low loss and high power situation, such as phased-array radar, satellite communication, avionics, telecommunications, etc.

Construction



Number	Name	Material	Size (mm)	
			QB1200	QB1500
1	Inner Conductor	Stranded silver-plated copper	3.50	4.40
2	Dielectric	Low density PTFE	9.90	12.50
3	Inner Shield	Silver-plated copper tap	10.17	12.82
4	Interlayer	Aluminum tap	10.30	12.95
5	Outer Shield	Silver-plated copper braid	11.02	13.67
6	Jacket	FEP	12.00	14.70

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	PIM (dBc)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QB1200	8	11	50	76	> 90	3000	-155	12.00	60.0 / 120.0	310	-55~+200
QB1500	6	10				4000		14.70	76.0 / 150.0	400	

Attenuation & Power Handling

Attenuation[*1] and Power Handling[*2]	Frequency (G) / Cable	0.1	0.3	0.5	1	2	3	4	5	6	8	Coefficient K
Attenuation (dB/100m)	QB1200	4.0	7.0	9.1	13.0	18.8	23.3	27.2	30.7	33.9	39.8	K1=0.391680
Average Power (W)		8450	4830	3713	2590	1793	1447	1238	1098	991	844	K2=0.000600
Attenuation (dB/100m)	QB1500	3.1	5.5	7.1	10.3	14.8	18.5	21.6	24.5	27.2	-	K1=0.304208
Average Power (W)		13440	7650	5870	4080	2818	2260	1928	1703	1537	-	K2=0.000591

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QG-Economical Low Loss Flexible Cables

QG series has the characteristics of low loss, and its specification and price are between QA series and QH series. It is suitable for interconnection within equipment.

Construction

Number	Name	Material	Size (mm)		
			QG360	QG500	QG800
1	Inner Conductor	Silver-plated copper	0.91	1.45	2.30
2	Dielectric	Low density PTFE	2.65	4.20	6.80
3	Inner Shield	Self-adhesive aluminum foil	2.78	4.32	6.95
4	Outer Shield	Silver-plated copper braid	3.25	4.65	7.50
5	Jacket	FEP	3.60	5.10	8.10

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QG360	18	40	50	76	> 70	1000	3.60	18.0 / 36.0	28	-55~+125
QG500	18	28			> 70	1500	5.10	25.0 / 51.0	60	
QG800	18	19			> 90	2000	8.10	40.0 / 81.0	120	

Attenuation & Power Handling

Attenuation*1 and Power Handling*2	Frequency (G) / Cable	0.3	0.5	1	2	6	8	10	12.4	18	Coefficient K
Attenuation (dB/100m)	QG360	21.0	27.2	38.7	55.1	96.9	112.5	126.4	141.5	172.3	K1=1.204032
Average Power (W)		850	657	462	325	185	159	141	126	104	K2=0.000600
Attenuation (dB/100m)	QG500	12.8	16.6	23.8	34.3	62.1	73.0	82.7	93.4	115.9	K1=0.718000
Average Power (W)		1428	1098	766	530	293	249	220	195	157	K2=0.001088
Attenuation (dB/100m)	QG800	8.0	10.5	15.1	21.9	40.1	47.3	53.8	61.0	76.3	K1=0.448000
Average Power (W)		3141	2409	1674	1152	629	533	469	413	331	K2=0.000898

[1] VSWR:1.0; Ambient:+25°C(77°F)

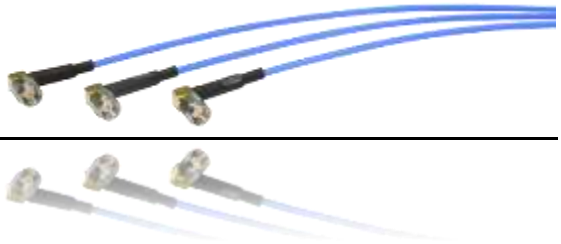
[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QH-Flexible, Alternative to Semirigid Cables

QH series are economical flexible cables. It can replace semi-rigid cable, semi-flexible cable, and it is suitable for interconnection inside the equipment.



Construction

Number	Name	Material	Size (mm)		
			QH160	QH280	QH400
1	Inner Conductor	Silver-plated copper	0.30	0.53	0.94
2	Dielectric	PTFE	0.95	1.63	3.00
3	Inner Shield	Silver-plated copper tape	1.10	1.83	3.20
4	Outer Shield	Silver-plated copper braid	1.35	2.18	3.55
5	Jacket	FEP (QH160 is PFA)	1.60	2.65	4.00

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QH160	18	110	50	70	> 90	300	1.60	6.0 / 16.0	5	-55~+125
Hot QH280	40	62				500	2.65	13.0 / 26.0	22	
Hot QH400	26.5	34				1500	4.00	20.0 / 40.0	49	

Attenuation & Power Handling (Multi-channel cable assemblies are available for QH280 series.)

Attenuation*1 and Power Handling*2	Frequency (G) / Cable		0.3	0.5	1	2	6	8	12.4	18	26.5	40	Coefficient K
Attenuation (dB/100m)	QH160		73.8	95.4	135.2	191.7	334.0	386.6	483.2	584.7	-	-	K1=4.248276
Average Power (W)			150	116	82	57	33	28	23	19	-	-	K2=0.000820
Attenuation (dB/100m)	Hot QH280		37.0	48.2	69.3	100.4	183.7	216.4	279.0	348.2	440.8	570.9	K1=2.066929
Average Power (W)			187	171	119	82	45	38	30	24	19	14	K2=0.003937
Attenuation (dB/100m)	Hot QH400		19.9	26.2	38.2	56.3	107.5	128.3	169.4	216.1	280.6	-	K1=1.082677
Average Power (W)			512	423	290	196	103	86	65	51	39	-	K2=0.003937

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QZ-Ultra-Flexible Cables

QZ series is ultra flexible RF cable, suitable for phased-array radar, laboratory test and small & complicated interconnection occasions.

Construction

Number	Name	Material	Size (mm)			
			QZ360	QZ500	QZ600	QZ800
1	Inner Conductor	Stranded Silver-plated copper	0.72	1.02	1.44	1.88
2	Dielectric	Low density PTFE	2.05	3.00	4.25	5.50
3	Inner Shield	Silver-plated copper tape	2.22	3.20	4.45	5.74
4	Outer Shield	Silver-plated copper braid	2.66	3.78	4.90	6.31
5	Jacket	PUR	3.60	5.00	5.90	8.00

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QZ360	40	51	50	76	> 90	500	3.60	18.0 / 36.0	30	-55~+85
QZ500	26.5	35				1000	5.00	25.0 / 50.0	50	
QZ600	26.5	29.5				1700	5.90	30.0 / 60.0	82	
QZ800	18	20				1700	8.00	40.0 / 80.0	130	

Attenuation & Power Handling

Attenuation[*1] and Power Handling[*2]	Frequency (G) / Cable	0.3	0.5	1	2	6	8	12.4	18	26.5	40	Coefficient K
Attenuation (dB/100m)	QZ360	28	36.3	51.9	74.5	133.4	156.1	198.7	244.9	305.5	388.8	K1=1.582929
Average Power (W)		220	169	119	82	46	39	31	25	20	16	K2=0.001806
Attenuation (dB/100m)	QZ500	20.4	26.7	38.5	55.6	103.2	122	157.9	198	252.1	-	K1=1.136600
Average Power (W)		280	215	149	102	55	46	36	29	23	-	K2=0.002530
Attenuation (dB/100m)	QZ600	15.6	20.2	28.7	41.2	73.6	86	109.2	134.3	167.2	-	K1=0.880600
Average Power (W)		321	248	175	122	68	59	46	37	30	-	K2=0.000900
Attenuation (dB/100m)	QZ800	9.5	12.5	18.2	26.8	50.9	60.7	80.0	101.9	-	-	K1=0.517315
Average Power (W)		626	477	327	222	117	98	74	58	-	-	K2=0.001806

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*$\sqrt{F\ (MHz)}$+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*$\sqrt{F\ (GHz)}$

QY-Outdoor Use Flexible Cables

QY is low loss flexible cable, suitable for outdoor, such as wireless base station, satellite communication, maritime communication.

Construction

Number	Name	Material	Size (mm)			
			QY460	QY520	QY635	QY1000
1	Inner Conductor	Silver-plated copper	1.02	1.29	1.57	2.44
2	Dielectric	Low density PTFE	3.07	3.91	4.72	7.24
3	Inner Shield	Silver-plated copper tap	3.27	4.15	4.96	7.48
4	Interlayer	Aluminum tape	3.43	4.28	5.10	7.61
5	Outer Shield	Silver-plated copper braid	3.94	4.79	5.66	8.19
6	Jacket	PUR	5.00	6.00	7.20	10.15

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)	Outdoor Life (year)
QY460	18	35	50	76	> 70	1000	5.00	25.0 / 50.0	56	-55~+85	20
QY520	18	35				1000	6.00	30.0 / 60.0	70		
QY635	18	27				2000	7.20	36.0 / 72.0	89		
QY1000	10	15				3000	10.15	50.0 / 100.0	190		

Attenuation & Power Handling

Attenuation*1 and Power Handling*2	Frequency (G) / Cable	0.3	0.5	1	3	6	8	10	12.4	18	Coefficient K
Attenuation (dB/100m)	QY460	19.2	24.9	35.4	62	88.8	103.2	116	129.9	158.3	K1=1.099485
Average Power (W)		366	283	199	113	79	68	61	54	44	K2=0.000602
Attenuation (dB/100m)	QY520	15	19.4	27.7	48.7	69.9	81.4	91.5	102.7	125.5	K1=0.856234
Average Power (W)		484	374	263	149	104	88	79	71	58	K2=0.000591
Attenuation (dB/100m)	QY635	12	15.6	22.2	39.2	56.4	65.8	74.2	83.4	102.2	K1=0.682743
Average Power (W)		660	509	357	202	140	120	107	95	77	K2= 0.000591
Attenuation (dB/100m)	QY1000	7.9	10.3	14.7	26.2	38.2	44.7	50.6	-	-	K1=0.446080
Average Power (W)		2053	1580	1104	619	425	363	321	-	-	K2=0.000600

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

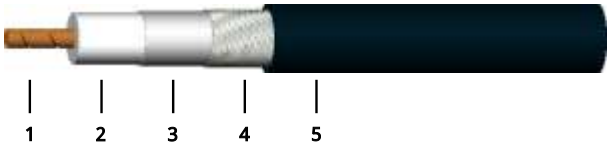
Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QR-Low Loss Wireless Communication Cables

QR wireless communication cable, with low loss and low cost, is mainly used in communication field, and also can be used for microwave product interconnection.

Construction



Cable	Size (mm)				
	Inner Conductor	Dielectric	Outer Conductor	Outer Shield	Jacket
QR280	0.46	1.52	1.65	2.11	2.80
QR500	0.94	2.79	2.95	3.53	5.00
QR500U	0.97	2.79	2.95	3.53	5.00
Hot QR600	1.42	3.81	3.94	4.52	6.00
QR600U	1.42	3.81	3.94	4.52	6.00
QR700	1.78	4.83	4.98	5.72	7.60
Hot QR1000	2.74	7.24	7.39	8.13	10.00
QR1000U	2.74	7.24	7.39	8.13	10.30
QR1500	4.47	11.56	11.72	12.45	15.00
QR1500U	4.47	11.56	11.71	12.45	15.00

Cable	1: Inner Conductor	2: Dielectric	3: Outer Conductor	4: Outer Shield	5: Jacket
QR280	Copper-clad steel	PE	Double-edged aluminum foil	Tin-plated copper braid	PE or PVC
QR500 / QR600 / QR700	Copper	Foam PE			PE or PVC
QR1000 / QR1500	Copper-clad aluminum	Foam PE			PE or PVC
QR500U / QR600U / QR1000U / QR1500U	Stranded Copper	Foam PE			TPE

Specifications

Cable	FREQ. (GHz)	Cut-off FREQ. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)	Outdoor Life (year)
QR280	5.8	63	50	66	> 90	500	2.80	6.4 / 28.0	10	-40~+85	20 or 10
QR500	5.8	41		80		1000	5.00	12.0 / 50.0	30		20 or 10
QR500U	5.8	41		80		1000	5.00	12.0 / 50.0	30		20
QR600	5.8	30		83		1500	6.00	20.0 / 65.0	50		20 or 10
QR600U	5.8	31		84		1500	6.00	20.0 / 65.0	50		20
QR700	5.8	24.5		83		2000	7.60	25.0 / 76.0	80		20 or 10
QR1000	5.8	16.2		84		2500	10.00	25.0 / 100.0	100		20 or 10
QR1000U	5.8	16.2		85		2500	10.30	25.0 / 100.0	130		20
QR1500	5.8	10.3		87		4000	15.00	38.0 / 152.0	200		20 or 10
QR1500U	2	10		87		4000	15.00	40.0 / 80.0	250		20

Attenuation & Power Handling (The attenuation in this table is typical value, and the maximum value is 1.1 times of the typical value.)

Attenuation[*1] and Power Handling[*2]	Cable \ Frequency (G)	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8	Coefficient K
Attenuation (dB/100m)	QR280	12.9	16.7	29.4	35.8	52.0	75.1	99.0	109.3	116	132	212	K1=2.3261155
Average Power (W)		230	180	100	83	57	39	29	27	25	22	13	K2=0.0059055
Attenuation (dB/100m)	QR500	6.5	8.4	14.7	17.8	25.7	36.7	47.9	52.8	55.8	62.8	98.6	K1=1.1778215
Average Power (W)		890	680	390	320	220	160	120	110	100	90	60	K2=0.0015420
Attenuation (dB/100m)	QR500U	7.7	10.0	17.4	21.1	30.4	43.5	56.8	62.5	66.1	75.4	117	K1=1.3943570
Average Power (W)		780	610	350	280	200	140	100	90	90	80	50	K2=0.0018701
Attenuation (dB/100m)	Hot QR600	4.4	5.7	10.0	12.2	17.5	25.1	32.8	36.1	38.1	42.9	67.5	K1=0.8038058
Average Power (W)		1490	1150	660	540	380	260	200	180	170	150	100	K2=0.0010827
Attenuation (dB/100m)	QR600U	5.3	6.9	12.1	14.6	21.1	30.2	39.5	43.4	45.9	51.7	81.3	K1=0.9678478
Average Power (W)		1240	960	550	450	310	220	170	150	140	130	80	K2=0.0013123
Attenuation (dB/100m)	QR700	3.5	4.6	8.0	9.7	14.1	20.2	26.4	29.1	30.8	34.7	55.0	K1=0.6397638
Average Power (W)		2090	1620	920	760	520	360	280	250	240	210	130	K2=0.0010827
Attenuation (dB/100m)	Hot QR1000	2.2	2.9	5.1	6.2	8.9	12.8	16.9	18.6	19.7	22.3	35.6	K1=0.4022310
Average Power (W)		3330	2570	1470	1200	830	580	440	400	370	330	210	K2=0.0008596
Attenuation (dB/100m)	QR1000U	2.7	3.5	6.1	7.4	10.7	15.4	20.3	22.4	23.7	26.7	42.8	K1=0.4822835
Average Power (W)		2770	2140	1220	1000	690	480	360	330	310	280	170	K2=0.0010499
Attenuation (dB/100m)	QR1500	1.4	1.8	3.2	3.9	5.7	8.4	11.1	12.3	13.0	14.8	24.2	K1=0.2526247
Average Power (W)		5510	4240	2410	1970	1350	930	700	630	590	520	320	K2=0.0008530
Attenuation (dB/100m)	QR1500U	1.7	2.2	3.8	4.6	6.8	9.8	13.1	14.5	15.4	-	-	K1=0.2974409
Average Power (W)		4590	3540	2010	1640	1130	770	580	530	500	-	-	K2=0.0010236

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

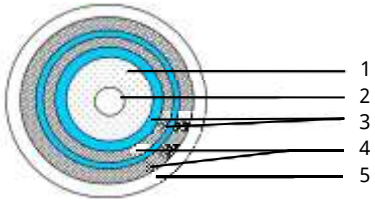
Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG-Low Cost, Flexible Cables

RG cable is a kind of low cost cable, which is mainly used for the interconnection of microwave equipments.

RG6



Number	Name	Size (mm)	Material
1	Dielectric	4.60	FPE
2	Inner Conductor	1.02	Copper
3	Outer Conductor	-	Aluminum plastic strip
4	Outer Conductor	-	Aluminum wire
5	Jacket	7.80	FEP

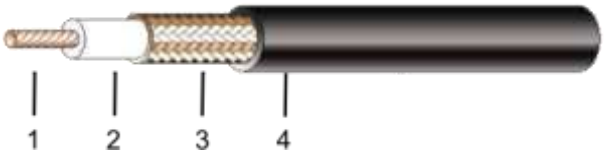
Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR	Capacitance (pF / m)	Bend Radius (mm)	TEMP. (°C)
0.005~2.2	75±3	83	1.25 @ 5~1000MHz 1.45 @ 1000~2200MHz	53	> 35	-20~+70

Frequency (G)	0.055	0.211	0.35	0.55	0.87	1	2.2	Coefficient K
Attenuation[*1] (dB/100m)	5.25	10	12.63	16.08	20.04	21.49	33.7	K1=0.71075768, K2=−0.00166783

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*$\sqrt{F\ (MHz)}$+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*$\sqrt{F\ (GHz)}$

RG58



Number	Name	Size (mm)	Material
1	Inner Conductor	0.90	Silver-plated copper
2	Dielectric	2.95	PE
3	Outer Shield	3.50	Bare copper
4	Jacket	4.95	Black PVC

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation Bend Radius (mm)	TEMP. (°C)
DC~1	50	66	1400	101.05	25	-40~+80

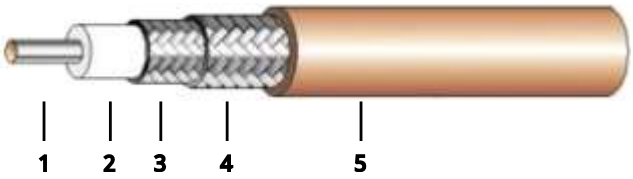
Frequency (G)	0.1	0.4	1	Coefficient K
Attenuation[*1] (dB/100m)	15.1	30.8	50.2	K1=1.500603, K2=0.001875

[1] VSWR:1.0; Ambient:+20°C(68°F)

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*$\sqrt{F\ (MHz)}$+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*$\sqrt{F\ (GHz)}$

RG142



Number	Name	Size (mm)	Material
1	Inner Conductor	0.93	Silver-plated copper
2	Dielectric	2.98	PTFE
3	Inner Shield	3.45	Silver-plated copper braid
4	Outer Shield	3.95	Silver-plated copper braid
5	Jacket	4.95	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~12.4	50	70	1400	95	25 / 50	-55~+200

Frequency (G)	0.1	0.4	1	3	5	6	12.4
Attenuation[*1] (dB/100m)	12.5	25.6	42	78.1	105	118.5	226.7

[1] VSWR:1.0; Ambient:+25°C(77°F)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*$\sqrt{F\ (GHz)}$

RG174

Number	Name	Size (mm)	Material
1	Inner Conductor	0.45	Bare copper wire
2	Dielectric	1.45	Solid PE
3	Outer Shield	2.00	Bare copper wire
4	Jacket	2.80	PVC

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation Bend Radius (mm)	TEMP. (°C)
DC~3	50	66	900	101	14	-20~+75

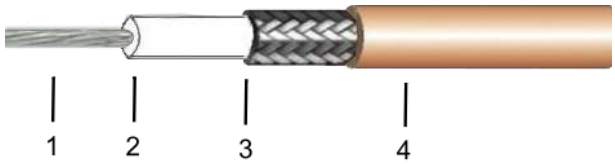
Frequency (G)	0.2	1.8	2.5	3	Coefficient K
Attenuation*1 (dB/100m)	44	147	181	199	K1=2.9578496, K2=0.011905

[1] VSWR:1.0; Ambient:+25°C(77°F)

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG178



Number	Name	Size (mm)	Material
1	Inner Conductor	0.3	Silverplated copper Wire
2	Dielectric	0.9	PTFE
3	Outer Conductor	1.3	Silverplated copper Wire
4	Jacket	1.8	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR (max.)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~6	50±2	70	1.30@DC~6GHz	1000	96	> 10 / > 40	-55~+200

Frequency (G)	0.1	0.4	1	2	3	4	5	6	Coefficient K
Attenuation*1 (dB/100m)	52	120	170	242	308	363	415	480	K1=2.577759, K2=0.004024

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG179

Number	Name	Size (mm)	Material
1	Inner Conductor	0.306	Silver plated copper wire
2	Dielectric	1.60	FEP
3	Outer Conductor	2.05	Silver plated copper wire
4	Jacket	2.54	FEP

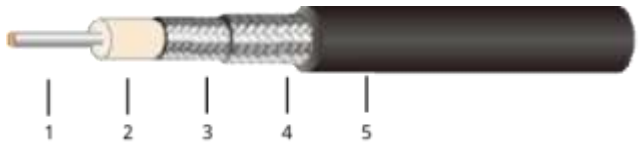
Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR (max.)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~3	75±2	70	1.20@DC~1GHz	1200	64	> 12 / > 50	-55~+200

Frequency (G)	0.1	0.4	1	Coefficient K
Attenuation*1 (dB/100m)	26.6	54.1	87.5	K1=2.64685263, K2=0.0028125

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG223



Number	Name	Size (mm)	Material
1	Inner Conductor	0.90	Silver-plated copper
2	Dielectric	2.95	PE
3	Inner Shield	112*0.12	Silver-plated copper braid
4	Outer Shield	112*0.12	Silver-plated copper braid
5	Jacket	5.4	PVC

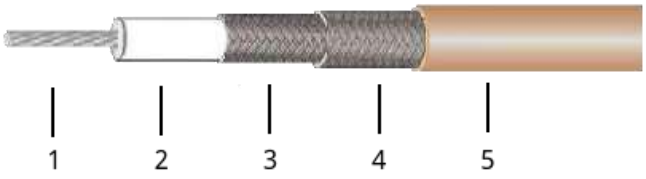
Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Bend Radius (mm)	Temperature (°C)
DC~6	50	66	1400	100	25	-20~+80

Frequency (G)	0.05	0.1	0.2	0.4	0.5	0.9	1.5	2	3	6
Attenuation[*1] (dB/100m)	14	16	19	28	37	44	59	70	88	145

[1] VSWR:1.0; Ambient:+25°C(77°F)

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG304



Number	Name	Size (mm)	Material
1	Inner Conductor	1.48	Silverplated copper Wire
2	Dielectric	4.60	PTFE
3	Outer Conductor1	5.00	Silverplated copper Wire
4	Outer Conductor2	5.60	Silverplated copper Wire
5	Jacket	7.10	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~6	50±2	70	3200	96	> 40 / > 71	-55~+200

Frequency (G)	0.03	0.2	3	5	6	Coefficient K
Attenuation[*1] (dB/100m)	6.27	16.5	73.7	78.9	86.9	K1=5.116766, K2=0.008134

[1] VSWR:1.0; Ambient:+25°C(77°F)

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG316

Number	Name	Size (mm)	Material
1	Inner Conductor	0.51	Stranded Silver-plated copper
2	Dielectric	1.50	FEP
3	Outer Shield	1.95	Silver-plated copper braid
4	Jacket	2.50	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	TEMP. (°C)
DC~6	50	70	600	96	-55~+200

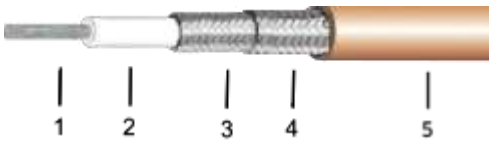
Frequency (G)	0.1	0.4	1	3	6	Coefficient K
Attenuation[*1] (dB/100m)	26.2	53.2	85.6	153.2	295	K1=2.583794, K2=0.003893

[1] VSWR:1.0; Ambient:+25°C(77°F)

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*\ F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

RG316D



Number	Name	Size (mm)	Material
1	Inner Conductor	0.51	Silverplated copper Wire
2	Dielectric	1.52	PTFE
3	Outer Conductor1	1.95	Silverplated copper Wire
4	Outer Conductor2	2.40	Silverplated copper Wire
5	Jacket	2.90	FEP

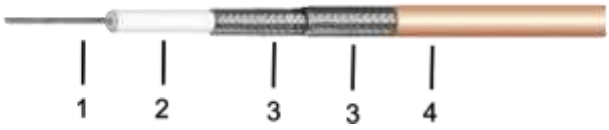
Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR (max.)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~6	50±2	70	1.20@DC~3GHz	1200	95	> 15 / > 50	-55~+200

Frequency (G)	0.1	0.4	1	3	5	6	Coefficient K
Attenuation*1 (dB/100m)	26.2	53.1	85.6	153.2	208	226	K1=2.577759, K2=0.004024

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*√F (MHz)+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*√F (GHz)

RG400



Number	Name	Size (mm)	Material
1	Inner Conductor	1.02	Silverplated copper Wire
2	Dielectric	2.98	PTFE
3	Outer Shield1	3.50	Silverplated copper Wire
3	Outer Shield2	4.00	Silverplated copper Wire
4	Jacket	4.95	TPU

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~12.4	50	70	1400	95	> 25 / > 50	-55~+200

Frequency (G)	0.1	0.4	1	3	5	11	12.4	Coefficient K
Attenuation*1 (dB/100m)	14.1	30.5	49.2	90.2	110	190	205	K1=1.379353, K2=0.007188

[1] VSWR:1.0; Ambient:+20°C(68°F)

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*√F (MHz)+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*√F (GHz)

RF113

Number	Name	Size (mm)	Material
1	Inner Conductor	0.24	Tinned Copper Wire
2	Dielectric	0.70	FEP
3	Outer Conductor	0.92	Tinned Copper Wire
4	Jacket	1.13	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR (max.)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~6	50±2	70	1.30@DC~6GHz	1000	98	> 5 / > 10	-55~+200

Frequency (G)	1	2	3	4	5	6	Coefficient K
Attenuation*1 (dB/100m)	220	310	380	440	490	540	K1=6.9592643, K2=-0.00065630

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*√F (MHz)+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*√F (GHz)

RF137

Number	Name	Size (mm)	Material
1	Inner Conductor	0.306	Tinned Copper Wire
2	Dielectric	0.90	FEP
3	Outer Conductor	1.13	Tinned Copper Wire
4	Jacket	1.37	FEP

Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	VSWR (max.)	Voltage Withstand (V DC)	Capacitance (pF / m)	Installation / Repeated Bend Radius (mm)	TEMP. (°C)
DC~6	50±2	70	1.30@DC~6GHz	1000	96	> 5 / > 20	-55~+200

Frequency (G)	1	2	3	4	5	6	Coefficient K
Attenuation[*1] (dB/100m)	170	250	300	350	400	450	K1=5.3386764, K2=0.00558114

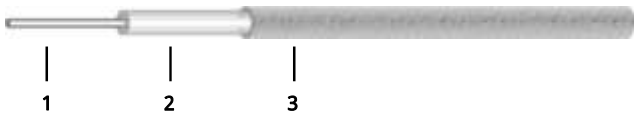
Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

QD-Semiflex Cables

QD series is a kind of semi-flexible RF cable, whose shape could be formed manually.
It is easy to assembly and often used for equipment interconnection.

Construction



Number	Name	Material	Size (mm)			
			QD047	QD086	QD141	QD250
1	Inner Conductor	Silver-plated copper (QD047 iS SCCS Silver-plated copper clad steel)	0.31	0.53	0.94	1.65
2	Dielectric	PTFE	0.94	1.65	2.98	5.25
3	Inner Shield	Tin-plated copper braid	1.19	2.17	3.55	6.30

Specifications

Cable	Frequency (GHz)	Cut-off Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QD047	20	-	50	70	-	900	1.19	4 / 20	-	-55~+200
Hot QD086	40	61			> 100	1000	2.17	10 / 20	20	-55~+150
Hot QD141	6	34.4			> 100	1500	3.55	17.75 / 35.5	50	-55~+150
QD250	6	19			> 100	2500	6.30	20 / 40	140	-55~+225

Attenuation & Power Handling

Attenuation[*1] and Power Handling[*2]	Frequency (G) / Cable	0.3	0.5	1	2	6	8	12.4	18	26.5	40	Coefficient K
Attenuation (dB/100m)	QD047	63	82	118	171	314	370	476	594.6	-	-	K1=3.512916
Average Power (W)		-	-	-	-	-	-	-	-	-	-	K2=0.006852
Attenuation (dB/100m)	Hot QD086	38.2	49.8	71.9	104.6	193.8	229.1	297.4	373.6	476.6	622.6	K1=2.115000
Average Power (W)		135	103	72	49	27	22	17	14	11	8	K2=0.004990
Attenuation (dB/100m)	Hot QD141	20.6	27	39.4	58.1	110.7	-	-	-	-	-	K1=1.119870
Average Power (W)		311	237	163	110	58	-	-	-	-	-	K2=0.003986
Attenuation (dB/100m)	QD250	12.14	16.03	23.6	35.23	69.09	-	-	-	-	-	K1=0.645600
Average Power (W)		713	540	367	246	125	-	-	-	-	-	K2=0.003180

[1] VSWR:1.0; Ambient:+25°C(77°F)

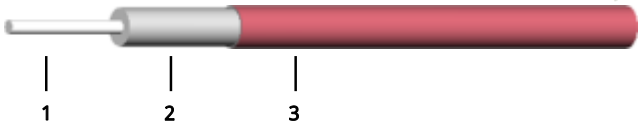
[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= K1*$\sqrt{F\ (MHz)}$+K2* F (MHz)

Calculate Single Connector Attenuation: Attenuation (dB)= 0.03*$\sqrt{F\ (GHz)}$

QE-Semirigid Cables

QE series semirigid RF cable with low PIM, is used for internal connection of precision instruments.



Construction

Number	Name	Material	Size (mm)			
			QE020	QE047	QE086	QE141
1	Inner Conductor	Silver-plated copper	0.127	0.28	0.53	0.94
2	Dielectric	PTFE	0.432	0.92	1.68	2.98
3	Outer Conductor	Ternary alloy plated seamless copper tube	0.580	1.20	2.18	3.58

Specifications

Cable	Frequency (GHz)	Cut-off Frequency (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation Bend Radius (mm)	Weight (g/m)	TEMP. (°C)
QE020	40	110	50	70	> 165	100	0.58	1.27	2	-55~+125
QE047	40	110				100	1.20	4.2	3	
QE086	40	64				400	2.18	7	19	
QE141	26.5	34				500	3.58	15	46	

Attenuation & Power Handling

Attenuation[*1] and Power Handling[*2]	Frequency (G) / Cable	0.3	0.5	1	6	10	12.4	18	26.5	40	Coefficient K
Attenuation (dB/100m)	QE020	130	170	240	600	780	870	1060	1300	1620	K1=7.5016
Average Power (W)		99	77	54	22	17	15	12	10	8	K2=0.0029
Attenuation (dB/100m)	QE047	62	80	114	290	380	430	520	650	820	K1=3.5016
Average Power (W)		109	84	59	23	18	16	13	10	8	K2=0.0029
Attenuation (dB/100m)	QE086	35.0	45.5	64.9	166.6	219.9	247.6	304.9	379.9	482.7	K1=1.985320
Average Power (W)		475	366	256	100	76	67	55	44	34	K2=0.002140
Attenuation (dB/100m)	QE141	20.3	26.5	38.2	102.4	137.7	156.4	195.9	249.2	-	K1=1.131702
Average Power (W)		1020	782	542	203	151	133	106	83	-	K2=0.002450

[1] VSWR:1.0; Ambient:+25°C(77°F)

[2] VSWR:1.0; Ambient:+40°C(104°F); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m)= $K1*\sqrt{F\ (MHz)}+K2*F\ (MHz)$

Calculate Single Connector Attenuation: Attenuation (dB)= $0.03*\sqrt{F\ (GHz)}$

Calibration Kits

Qualwave supplies calibration kits with different types to meet the needs of customers.

Features: High Precision; **Applications:** Calibration, Laboratory Test.

QCK-N-9-10:

QCK-3-9-3-M:

QCK-3-9-3-F:

Calibration Kits

Components included in the calibration kits: '√' means included, '×' means not included.

Part Number	Frequency (GHz)	Type	Conenector	Quantity	Open		Short		Termination		Torque Wrench	Adapter		
					M	F	M	F	M	F		M to M	M to F	F to F
QCK-V-67-10	DC~67	Precision	1.85mm	10	√	√	√	√	√	√	√	√	√	√
QCK-2-50-10	0.1 ~ 50	Precision	2.4mm	10	√	√	√	√	√	√	√	√	√	√
QCK-K-40-1-10	DC~40	Precision	2.92mm	10	√	√	√	√	√	√	√	√	√	√
QCK-K-40-1-3M	DC~40	Precision	2.92mm	3	√	×	√	×	√	×	×	×	×	×
QCK-K-40-1-3F	DC~40	Precision	2.92mm	3	×	√	×	√	×	√	×	×	×	×
QCK-K-40-1-6	DC~40	Precision	2.92mm	6	√	√	√	√	√	√	×	×	×	×
QOKC-M-40-1	DC~40	Precision	2.92mm	1	√	×	×	×	×	×	×	×	×	×
QOKC-F-40-1	DC~40	Precision	2.92mm	1	×	√	×	×	×	×	×	×	×	×
QSKC-M-40-1	DC~40	Precision	2.92mm	1	×	×	√	×	×	×	×	×	×	×
QSKC-F-40-1	DC~40	Precision	2.92mm	1	×	×	×	√	×	×	×	×	×	×
QCT-K-C-M-40-1	DC~40	Precision	2.92mm	1	×	×	×	×	√	×	×	×	×	×
QCT-K-C-F-40-1	DC~40	Precision	2.92mm	1	×	×	×	×	×	√	×	×	×	×
QW-K1-CK	DC~40	Precision	2.92mm	1	×	×	×	×	×	×	√	×	×	×
QAKKC-MM	DC~40	Precision	2.92mm	1	×	×	×	×	×	×	×	√	×	×
QAKKC-MF	DC~40	Precision	2.92mm	1	×	×	×	×	×	×	×	×	√	×
QAKKC-FF	DC~40	Precision	2.92mm	1	×	×	×	×	×	×	×	×	×	√
QCK-3-26.5-1-10	DC~26.5	Precision	3.5mm	10	√	√	√	√	√	√	√	√	√	√
QCK-3-26.5-1-3M	DC~26.5	Precision	3.5mm	3	√	×	√	×	√	×	×	×	×	×
QCK-3-26.5-1-3F	DC~26.5	Precision	3.5mm	3	×	√	×	√	×	√	×	×	×	×
QCK-3-26.5-1-6	DC~26.5	Precision	3.5mm	6	√	√	√	√	√	√	×	×	×	×
QO3C-M-26.5-1	DC~26.5	Precision	3.5mm	1	√	×	×	×	×	×	×	×	×	×
QO3C-F-26.5-1	DC~26.5	Precision	3.5mm	1	×	√	×	×	×	×	×	×	×	×
QS3C-M-26.5-1	DC~26.5	Precision	3.5mm	1	×	×	√	×	×	×	×	×	×	×
QS3C-F-26.5-1	DC~26.5	Precision	3.5mm	1	×	×	×	√	×	×	×	×	×	×
QCT-3-C-M-26.5-1	DC~26.5	Precision	3.5mm	1	×	×	×	×	√	×	×	×	×	×
QCT-3-C-F-26.5-1	DC~26.5	Precision	3.5mm	1	×	×	×	×	×	√	×	×	×	×
QW-31-CK	DC~26.5	Precision	3.5mm	1	×	×	×	×	×	×	√	×	×	×
QA33C-MM-1	DC~26.5	Precision	3.5mm	1	×	×	×	×	×	×	×	√	×	×
QA33C-MF-1	DC~26.5	Precision	3.5mm	1	×	×	×	×	×	×	×	×	√	×
QA33C-FF-3	DC~26.5	Precision	3.5mm	1	×	×	×	×	×	×	×	×	×	√
QCK-3-26.5-3-3M	DC~26.5	3-in-1	3.5mm	3-in-1	√	×	√	×	√	×	×	×	×	×
QCK-3-26.5-3-F	DC~26.5	3-in-1	3.5mm	3-in-1	×	√	×	√	×	√	×	×	×	×
QA33C-MM-1	DC~26.5	-	3.5mm	1	×	×	×	×	×	×	×	√	×	×
QA33C-FF-3	DC~26.5	-	3.5mm	1	×	×	×	×	×	×	×	×	×	√
QCK-3-9-1-10	DC~9	Precision	3.5mm	10	√	√	√	√	√	√	√	√	√	√
QCK-3-9-1-3M	DC~9	Precision	3.5mm	3	√	×	√	×	√	×	×	×	×	×
QCK-3-9-1-3F	DC~9	Precision	3.5mm	3	×	√	×	√	×	√	×	×	×	×
QCK-3-9-1-6	DC~9	Precision	3.5mm	6	√	√	√	√	√	√	×	×	×	×
QO3C-M-9-1	DC~9	Precision	3.5mm	1	√	×	×	×	×	×	×	×	×	×
QO3C-F-9-1	DC~9	Precision	3.5mm	1	×	√	×	×	×	×	×	×	×	×
QS3C-M-9-1	DC~9	Precision	3.5mm	1	×	×	√	×	×	×	×	×	×	×
QS3C-F-9-1	DC~9	Precision	3.5mm	1	×	×	×	√	×	×	×	×	×	×
QCT-3-C-M-9-1	DC~9	Precision	3.5mm	1	×	×	×	×	√	×	×	×	×	×
QCT-3-C-F-9-1	DC~9	Precision	3.5mm	1	×	×	×	×	×	√	×	×	×	×
QW-31-CK	DC~9	Precision	3.5mm	1	×	×	×	×	×	×	√	×	×	×
QA33C-MM	DC~9	Precision	3.5mm	1	×	×	×	×	×	×	×	√	×	×

Components included in the calibration kits: '√' means included, '×' means not included.

Part Number	Frequency (GHz)	Type	Conenector	Quantity	Open		Short		Termination		Torque Wrench	Adapter		
					M	F	M	F	M	F		M to M	M to F	F to F
QA33C-MF	DC~9	Precision	3.5mm	1	×	×	×	×	×	×	×	×	√	×
QA33C-FF-2	DC~9	Precision	3.5mm	1	×	×	×	×	×	×	×	×	×	√
QCK-3-9-3-M	DC~9	3-in-1	3.5mm	3-in-1	√	×	√	×	√	×	×	×	×	×
QCK-3-9-3-F	DC~9	3-in-1	3.5mm	3-in-1	×	√	×	√	×	√	×	×	×	×
QA33C-MM	DC~9	-	3.5mm	1	×	×	×	×	×	×	×	√	×	×
QA33C-FF-2	DC~9	-	3.5mm	1	×	×	×	×	×	×	×	×	×	√
QCK-3-6-2-10	DC~6	Economic	3.5mm	10	√	√	√	√	√	√	√	√	√	√
QCK-3-6-2-3M	DC~6	Economic	3.5mm	3	√	×	√	×	√	×	×	×	×	×
QCK-3-6-2-3F	DC~6	Economic	3.5mm	3	×	√	×	√	×	√	×	×	×	×
QCK-3-6-2-6	DC~6	Economic	3.5mm	6	√	√	√	√	√	√	×	×	×	×
QO3C-M-6-2	DC~6	Economic	3.5mm	1	√	×	×	×	×	×	×	×	×	×
QO3C-F-6-2	DC~6	Economic	3.5mm	1	×	√	×	×	×	×	×	×	×	×
QS3C-M-6-2	DC~6	Economic	3.5mm	1	×	×	√	×	×	×	×	×	×	×
QS3C-F-6-2	DC~6	Economic	3.5mm	1	×	×	×	√	×	×	×	×	×	×
QCT-3-C-M-6-2	DC~6	Economic	3.5mm	1	×	×	×	×	√	×	×	×	×	×
QCT-3-C-F-6-2	DC~6	Economic	3.5mm	1	×	×	×	×	×	√	×	×	×	×
QW-31-CK	DC~6	Economic	3.5mm	1	×	×	×	×	×	×	√	×	×	×
QA33C-MM-2	DC~6	Economic	3.5mm	1	×	×	×	×	×	×	×	√	×	×
QA33C-MF-2	DC~6	Economic	3.5mm	1	×	×	×	×	×	×	×	×	√	×
QA33C-FF-4	DC~6	Economic	3.5mm	1	×	×	×	×	×	×	×	×	×	√
QCK-J-18-6	DC~18	-	7mm	6	7mm: open & short & termination						√	7mm-N (m), 7mm-N (f)		
QOJC-18	DC~18	-	7mm	1	7mm: open						×	×		
QSJC-18	DC~18	-	7mm	1	7mm: short						×	×		
QCT-J-C-18	DC~18	-	7mm	1	7mm: termination						×	×		
QW-J1-CK	DC~18	-	7mm	1	×						√	×		
QANJC-M	DC~18	-	7mm	1	×						×	7mm-N (m)		
QANJC-F	DC~18	-	7mm	1	×						×	7mm-N (f)		
QCK-L1-9-10	DC~9	-	L16	10	√	√	√	√	√	√	√	√	√	√
QCK-L1-9-1-3M	DC~9	-	L16	3	√	×	√	×	√	×	×	×	×	×
QCK-L1-9-1-3F	DC~9	-	L16	3	×	√	×	√	×	√	×	×	×	×
QCK-L1-9-1-6	DC~9	-	L16	6	√	√	√	√	√	√	×	×	×	×
QOL1C-M-9	DC~9	-	L16	1	√	×	×	×	×	×	×	×	×	×
QOL1C-F-9	DC~9	-	L16	1	×	√	×	×	×	×	×	×	×	×
QSL1C-M-9	DC~9	-	L16	1	×	×	√	×	×	×	×	×	×	×
QSL1C-F-9	DC~9	-	L16	1	×	×	×	√	×	×	×	×	×	×
QCT-L1-C-M-9	DC~9	-	L16	1	×	×	×	×	√	×	×	×	×	×
QCT-L1-C-F-9	DC~9	-	L16	1	×	×	×	×	×	√	×	×	×	×
QW-L11-CK	DC~9	-	L16	1	×	×	×	×	×	×	√	×	×	×
QAL1L1C-MM	DC~9	-	L16	1	×	×	×	×	×	×	×	√	×	×
QAL1L1C-MF	DC~9	-	L16	1	×	×	×	×	×	×	×	×	√	×
QAL1L1C-FF	DC~9	-	L16	1	×	×	×	×	×	×	×	×	×	√
QCK-N-18-1-10	DC~18	Precision	N	10	√	√	√	√	√	√	√	√	√	√
QCK-N-18-1-3M	DC~18	Precision	N	3	√	×	√	×	√	×	×	×	×	×
QCK-N-18-1-3F	DC~18	Precision	N	3	×	√	×	√	×	√	×	×	×	×
QCK-N-18-1-6	DC~18	Precision	N	6	√	√	√	√	√	√	×	×	×	×
QONC-M-18-1	DC~18	Precision	N	1	√	×	×	×	×	×	×	×	×	×
QONC-F-18-1	DC~18	Precision	N	1	×	√	×	×	×	×	×	×	×	×
QSNC-M-18-1	DC~18	Precision	N	1	×	×	√	×	×	×	×	×	×	×
QSNC-F-18-1	DC~18	Precision	N	1	×	×	×	√	×	×	×	×	×	×
QCT-N-C-M-18-1	DC~18	Precision	N	1	×	×	×	×	√	×	×	×	×	×
QCT-N-C-F-18-1	DC~18	Precision	N	1	×	×	×	×	×	√	×	×	×	×
QW-N1-CK	DC~18	Precision	N	1	×	×	×	×	×	×	√	×	×	×
QANNC-MM-1	DC~18	Precision	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-MF-1	DC~18	Precision	N	1	×	×	×	×	×	×	×	×	√	×
QANNC-FF-1	DC~18	Precision	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-9-1-10	DC~9	Precision	N	10	√	√	√	√	√	√	√	√	√	√
QCK-N-9-1-3M	DC~9	Precision	N	3	√	×	√	×	√	×	×	×	×	×
QCK-N-9-1-3F	DC~9	Precision	N	3	×	√	×	√	×	√	×	×	×	×
QCK-N-9-1-6	DC~9	Precision	N	6	√	√	√	√	√	√	×	×	×	×
QONC-M-9-1	DC~9	Precision	N	1	√	×	×	×	×	×	×	×	×	×
QONC-F-9-1	DC~9	Precision	N	1	×	√	×	×	×	×	×	×	×	×
QSNC-M-9-1	DC~9	Precision	N	1	×	×	√	×	×	×	×	×	×	×

Components included in the calibration kits: '√' means included, '×' means not included.

Part Number	Frequency (GHz)	Type	Conenector	Quantity	Open		Short		Termination		Torque Wrench	Adapter		
					M	F	M	F	M	F		M to M	M to F	F to F
QSNC-F-9-1	DC~9	Precision	N	1	×	×	×	√	×	×	×	×	×	×
QCT-N-C-M-9-1	DC~9	Precision	N	1	×	×	×	×	√	×	×	×	×	×
QCT-N-C-F-9-1	DC~9	Precision	N	1	×	×	×	×	×	√	×	×	×	×
QW-N1-CK	DC~9	Precision	N	1	×	×	×	×	×	×	√	×	×	×
QANNC-MM	DC~9	Precision	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-MF	DC~9	Precision	N	1	×	×	×	×	×	×	×	×	√	×
QANNC-FF	DC~9	Precision	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-9-3-M	DC~9	3-in-1	N	3-in-1	√	×	√	×	√	×	×	×	×	×
QCK-N-9-3-F	DC~9	3-in-1	N	3-in-1	×	√	×	√	×	√	×	×	×	×
QANNC-MM	DC~9	-	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-FF	DC~9	-	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-6-1-10	DC~6	Precision	N	10	√	√	√	√	√	√	√	√	√	√
QCK-N-6-1-3M	DC~6	Precision	N	3	√	×	√	×	√	×	×	×	×	×
QCK-N-6-1-3F	DC~6	Precision	N	3	×	√	×	√	×	√	×	×	×	×
QCK-N-6-1-6	DC~6	Precision	N	6	√	√	√	√	√	√	×	×	×	×
QONC-M-6-1	DC~6	Precision	N	1	√	×	×	×	×	×	×	×	×	×
QONC-F-6-1	DC~6	Precision	N	1	×	√	×	×	×	×	×	×	×	×
QSNC-M-6-1	DC~6	Precision	N	1	×	×	√	×	×	×	×	×	×	×
QSNC-F-6-1	DC~6	Precision	N	1	×	×	×	√	×	×	×	×	×	×
QCT-N-C-M-6-1	DC~6	Precision	N	1	×	×	×	×	√	×	×	×	×	×
QCT-N-C-F-6-1	DC~6	Precision	N	1	×	×	×	×	×	√	×	×	×	×
QW-N1-CK	DC~6	Precision	N	1	×	×	×	×	×	×	√	×	×	×
QANNC-MM	DC~6	Precision	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-MF	DC~6	Precision	N	1	×	×	×	×	×	×	×	×	√	×
QANNC-FF	DC~6	Precision	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-6-2-10	DC~6	Economic	N	10	√	√	√	√	√	√	√	√	√	√
QCK-N-6-2-3M	DC~6	Economic	N	3	√	×	√	×	√	×	×	×	×	×
QCK-N-6-2-3F	DC~6	Economic	N	3	×	√	×	√	×	√	×	×	×	×
QCK-N-6-2-6	DC~6	Economic	N	6	√	√	√	√	√	√	×	×	×	×
QONC-M-6-2	DC~6	Economic	N	1	√	×	×	×	×	×	×	×	×	×
QONC-F-6-2	DC~6	Economic	N	1	×	√	×	×	×	×	×	×	×	×
QSNC-M-6-2	DC~6	Economic	N	1	×	×	√	×	×	×	×	×	×	×
QSNC-F-6-2	DC~6	Economic	N	1	×	×	×	√	×	×	×	×	×	×
QCT-N-C-M-6-2	DC~6	Economic	N	1	×	×	×	×	√	×	×	×	×	×
QCT-N-C-F-6-2	DC~6	Economic	N	1	×	×	×	×	×	√	×	×	×	×
QW-N1-CK	DC~6	Economic	N	1	×	×	×	×	×	×	√	×	×	×
QANNC-MM-2	DC~6	Economic	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-MF-2	DC~6	Economic	N	1	×	×	×	×	×	×	×	×	√	×
QANNC-FF-2	DC~6	Economic	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-6-3-M	DC~6	3-in-1	N	3-in-1	√	×	√	×	√	×	×	×	×	×
QCK-N-6-3-F	DC~6	3-in-1	N	3-in-1	×	√	×	√	×	√	×	×	×	×
QANNC-MM	DC~6	-	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-FF	DC~6	-	N	1	×	×	×	×	×	×	×	×	×	√
QCK-N-4-3-M	DC~4	3-in-1	N	3-in-1	√	×	√	×	√	×	×	×	×	×
QCK-N-4-3-F	DC~4	3-in-1	N	3-in-1	×	√	×	√	×	√	×	×	×	×
QANNC-MM	DC~4	-	N	1	×	×	×	×	×	×	×	√	×	×
QANNC-FF-3	DC~4	-	N	1	×	×	×	×	×	×	×	×	×	√

Circulators/Isolators

Circulator, including coaxial circulators, drop-in circulators and surface mount circulators, is a multi port component which transmits the forward-travelling wave from one port to the next port in the direction determined by the static bias magnetic field. It is a non-reversible device with several terminals.

Isolator makes the RF signal transmit in one direction, including coaxial circulators, Drop-In circulators and surface mount circulators.

Qualwave provides a series of 10MHz~110GHz broadband, high-power circulators and isolators.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Wireless, Radar, Laboratory Test.

Coaxial Circulators

How To Order:

QTCU-V-W-X-Y-Z

- Package: Coaxial - C, Drop-In - D, Surface Mount - S
- Serial Number
- Start Frequency (MHz)
- Stop Frequency (MHz)
- Direction Type: Clockwise - 1, Anticlockwise - 2
- Connector Type (Note: Drop-In and Surface Mount circulator do not include connectors, leave blank here.)
- Average Power (W)

Examples: To order a 6466H series coaxial circulator, 55~75MHz, 100W, N female, clockwise, specify QCC6466H-55-75-K1-N-1.

The sizes in the following table do not include connectors. When the connector is SMA, the maximum average power can only reach 100W. The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	Frequency (GHz)	Bandwidth* (MHz, max.)	IL. (dB, max.)	ISO. (dB, min.)	VSWR (max.)	Average Power* (W, max.)	Connector	Direction	Temperature (°C)	Size* (mm)
QCC6466H	0.02~0.4	175	2	18	1.3	100	SMA, N	CW, ACW	-20~+70	64*66*22
QCC6466E	0.07~0.2	30	0.6	10	1.3	500	SMA, N	CW, ACW	-20~+70	64*66*22
QCC8080E	0.15~0.89	80	0.6	19	1.25	1000	7/16DIN	CW, ACW	-30~+75	80*80*34
QCC5258E	0.16~0.33	70	0.7	18	1.3	400	SMA, N	CW, ACW	-30~+70	52*57.5*22
QCC4550X	0.3~1.1	300	0.6	17	1.35	400	SMA, N	CW, ACW	-30~+70	45*49*18
QCC3538X	0.3~1.85	500	0.7	25	1.35	300	SMA, N	CW, ACW	-30~+70	35*38*15
QCC3033X	0.7~3	600	0.6	15	1.45	200	SMA	CW, ACW	-30~+70	30*33*15
QCC3232X	0.7~3	600	0.6	15	1.45	200	SMA, N	CW, ACW	-30~+70	32*32*15
QCC3434E	0.7~3	600	0.6	15	1.45	200	SMA, N	CW, ACW	-30~+70	34*34*22
QCC2528B	0.8~4	400	0.4	20	1.25	200	SMA, N	CW, ACW	-30~+70	25.4*28.5*15
QCC6466K	0.95~2	1050	0.65	16	1.4	100	SMA, N	CW, ACW	-10~+60	64*66*26
QCC2025B	1.3~4	400	0.4	20	1.25	100	SMA	CW, ACW	-30~+70	20*25.4*15
QCC5050A	1.5~3	1500	0.7	17	1.4	100	SMA, N	CW, ACW	0~+60	50.8*49.5*19
QCC4040A	1.8~3.6	1800	0.7	17	1.35	100	N	CW, ACW	-20~+85	20*25.4*14
QCC2025X	2.4~2.5	100	0.3	25	1.2	100	SMA	CW, ACW	0~+60	25.4*28*14
QCC5028B	2.6~3.2	600	1	35	1.35	100	SMA	CW, ACW	0~+60	32*34*21
QCC2528C	2.7~6.2	3500	0.8	16	1.4	200	SMA, N	CW, ACW	-40~+70	30.5*30.5*15
QCC3234A	2~4	2000	0.6	17	1.35	100	SMA, N	CW, ACW	0~+60	32*34*21
QCC3030B	2~6	4000	1.7	12	1.6	20	SMA	CW, ACW	-40~+70	30.5*30.5*15
QCC1523C	3.6~7.2	1400	0.5	18	1.35	60	SMA	CW, ACW	-10~+60	15*22.5*13.8
QCC2123B	4~8	4000	0.6	18	1.35	50	SMA, N	CW, ACW	-10~+60	15*22.5*13.8
QCC-5000-10000-10-S-1	5~10	5000	0.6	17	1.35	10	SMA	CW	-10~+60	21*22.5*15
QCC1623C	5.725~5.85	125	0.3	23	1.2	100	SMA	CW, ACW	-20~+80	16*23*13
QCC1620B	6~18	12000	1.5	10	1.9	30	SMA	CW, ACW	0~+60	16*20.3*14
QCC1319C	7~13	4000	0.5	18	1.3	50	SMA	CW, ACW	-10~+60	13*19*12.7
QCC1215C	9~16.5	2200	0.5	18	1.3	30	SMA	CW, ACW	0~+60	16*21.5*14
QCC-18000-26500-5-K-1	18~26.5	8500	0.7	16	1.4	5	2.92mm	CW	-30~+75	12*15*10
QCC-24250-33400-5-K-1	24.25~33.4	9150	1.6	14	1.6	5	2.92mm	CW, ACW	-30~+70	19*15*13
QCC-26500-40000-5-K-1	26.5~40	13500	1.6	14	1.6	5	2.92mm	CW	-30~+70	13*25*16.8

Drop-In Circulators

How To Order:

QTCU-V-W-X-Y-Z

Package: Coaxial - C, Drop-In - D, Surface Mount - S
Serial Number
Start Frequency (MHz)
Stop Frequency (MHz)
Direction Type: Clockwise - 1, Anticlockwise - 2
Connector Type
(Note: Drop-In and Surface Mount circulator do not include connectors, leave blank here.)
Average Power (W)

Examples: To order a 6060H series Drop-In circulator, 70~75MHz, 50W, clockwise, specify QDC6060H-70-75-50-1.

The sizes in the following table do not include connectors. The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	Frequency (GHz)	Bandwidth* (MHz, max.)	TL. (dB, max.)	ISO. (dB, min.)	VSWR (max.)	AVG. PWR. (W, max.)	Direction	TEMP. (°C)	Size* (mm)
QDC6060H	0.02~0.4	175	2	18	1.3	100	CW, ACW	-10~+60	60*60*25.5
QDC6466H	0.02~0.4	175	2	18	1.3	100	CW, ACW	-10~+60	64*66*22
QDC5050X	0.15~0.33	70	0.7	18	1.3	400	CW, ACW	-30~+70	50.8*50.8*14.8
QDC4545X	0.3~1	300	0.5	18	1.3	400	CW, ACW	-30~+70	45*45*13
QDC3538X	0.3~1.85	500	0.7	18	1.35	300	CW, ACW	-30~+70	35*35*11
QDC3838X	0.3~1.85	106	0.4	20	1.25	300	CW, ACW	-30~+70	38*38*11
QDC2525X	0.35~4	770	0.65	15	1.45	250	CW, ACW	-30~+70	25.4*25.4*10
QDC2020X	0.6~4	900	0.5	18	1.35	100	CW, ACW	-30~+70	20*20*8.6
QDC1919X	0.8~4.3	900	0.5	18	1.35	100	CW, ACW	-30~+70	19*19*8.6
QDC6466K	0.95~2	1050	0.7	16	1.4	100	CW, ACW	-10~+60	64*66*26
QDC1313T	1.2~6	800	0.45	18	1.3	100	CW, ACW	-30~+70	12.7*12.7*7.2
QDC5050A	1.5~3	1500	0.7	17	1.4	100	CW, ACW	0~+60	50.8*49.5*19
QDC4040A	1.7~3	1200	0.7	16	1.35	200	CW, ACW	0~+60	40*40*20
QDC1313M	1.7~6	800	0.45	18	1.3	100	CW, ACW	-30~+70	12.7*12.7*7.2
QDC2528C	2.7~6	3500	0.8	16	1.4	200	CW, ACW	-30~+70	25.4*28*14
QDC3234A	2~4	2000	0.6	16	1.35	100	CW, ACW	0~+60	32*34*21
QDC3030B	2~6	4000	1.7	12	1.6	20	CW, ACW	-40~+70	30.5*30.5*15
QDC1822D	4~5	1000	0.4	18	1.35	60	CW, ACW	-30~+70	18*22*10.4
QDC2123B	4~8	4000	0.6	18	1.35	60	CW, ACW	0~+60	21*22.5*15
QDC1220D	5~6.5	800	0.5	18	1.3	60	CW, ACW	-30~+70	12*20*9.5
QDC1623D	5~6.5	800	0.5	18	1.3	50	CW, ACW	-30~+70	16*23*9.7
QDC1319C	6~12	4000	0.5	18	1.3	50	CW, ACW	0~+60	13*19*12.7
QDC1620B	6~18	12000	1.5	10	1.9	20	CW, ACW	-30~+70	16*20.3*14
QDC0915D	7~18	6000	0.6	17	1.35	30	CW, ACW	-30~+70	8.9*15*7.8

Surface Mount Circulators

How To Order:

QTCU-V-W-X-Y-Z

Package: Coaxial - C, Drop-In - D, Surface Mount - S
Serial Number
Start Frequency (MHz)
Stop Frequency (MHz)
Direction Type: Clockwise - 1, Anticlockwise - 2
Connector Type
(Note: Drop-In and Surface Mount circulator do not include connectors, leave blank here.)
Average Power (W)

Examples: To order a 12R5 series surface mount circulator, 2.4~2.5GHz, 60W,, clockwise, specify QSC12R5-2400-2500-60-1.

The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	Frequency (GHz)	Bandwidth * (MHz, max.)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Average Power (W, max.)	Direction	Temperature (°C)	Size (mm)
QSC25R4	0.41~0.505	50	0.5	18	1.3	60	CW, ACW	-40~+85	Φ25.4×7
QSC20	0.7~3.655	770	0.5	15	1.3	60	CW, ACW	-40~+85	Φ20×8
QSC12R5	0.79~5.9	200	0.5	18	1.3	60	CW, ACW	-40~+85	Φ12.5×7
QSC15	0.8~3.65	400	0.6	18	1.3	60	CW, ACW	-40~+85	Φ15.2×7
QSC18	1.4~3.655	100	0.35	23	1.2	60	CW, ACW	-40~+85	Φ18×8
QSC12R3B	2.496~3.8	1000	0.6	18	1.3	60	CW, ACW	-40~+85	Φ12.3×7
QSC12R3A	3.3~6	1000	0.5	18	1.3	60	CW, ACW	-40~+85	Φ12.3×7

Coaxial Isolators

How To Order:

QSIT-U-V-W-X-Y-Z

Package: Coaxial - C, Drop-In - D, Surface Mount - S

Serial Number

Start Frequency (MHz)

Stop Frequency (MHz)

Direction Type: Clockwise - 1, Anticlockwise - 2

Connector Type
(Note: Drop-In and Surface Mount isolator do not include connectors, leave blank here.)

Reverse Power (W)

Forward Power (W)

Examples: To order a 6466H series coaxial isolator, 30~40MHz, forward power 30W, reverse power 20W, SMA female, clockwise, specify QCI6466H-30-40-30-20-S-1.

The sizes in the following table do not include connectors and terminations. When the connector is SMA, the maximum average power can only reach 100W. The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	Frequency (GHz)	Bandwidth * (MHz, max.)	IL. (dB, max.)	ISO. (dB, min.)	VSWR (max.)	FWD. Power* (W, max.)	REV. Power (W)	Connector	TEMP. (°C)	Size* (mm)
QCI6060E	0.02~0.4	175	2	18	1.3	100	10~100	SMA, N	-20~+70	60*60*25.5
QCI6466H	0.02~0.4	175	2	18	1.3	100	20~100	SMA, N	0~+60	64*66*22
QCI12060H	0.07~0.23	56	2	40	1.3	150	10~100	SMA, N	-30~+70	120*60*25.5
QCI23085H	0.07~0.23	60	1.8	60	1.25	150	100	SMA, N	-30~+75	230*85*30
QCI5258E	0.16~0.33	70	0.7	18	1.3	500	10~100	SMA, N	-30~+70	52*57.5*22
QCI10458E	0.18~0.86	60	1	38	1.3	300	10~100	SMA, N	-30~+70	104*57.5*22
QCI12762H	0.3~0.5	40	0.8	45	1.25	300	10~100	SMA, N	-30~+70	127*62*22
QCI4550E	0.3~1.1	300	0.6	18	1.3	400	10~100	SMA, N	-30~+70	45*50*25
QCI4550X	0.3~1.1	300	0.6	18	1.3	400	10~100	SMA, N	-30~+70	45*49*18
QCI3538X	0.3~1.85	500	0.7	18	1.35	300	10~100	SMA, N	-30~+70	35*38*15
QCI9648H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*48*24
QCI9650H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*50*26.5
QCI9662H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*62*26
QCI16080H	0.38~0.47	70	1.2	60	1.25	300	100	SMA, N	-10~+60	160*80*30
QCI7448H	0.45~2.7	400	0.8	38	1.25	250	10~100	SMA, N	-30~+70	73.8*48.4*22.5
QCI3033X	0.7~3	600	0.6	15	1.45	100	10~100	SMA	-30~+70	30*33*15
QCI3232X	0.7~3	600	0.6	15	1.45	200	10~100	SMA, N	-30~+70	32*32*15
QCI3434E	0.7~3	600	0.6	15	1.45	200	10~100	SMA, N	-30~+70	34*34*22
QCI2528B	0.9~4	400	0.4	20	1.25	200	10~100	SMA, N	-30~+70	25.4*28.5*15
QCI6466K	0.95~2	1050	0.65	16	1.4	100	10~100	SMA, N	-30~+70	64*66*26
QCI-1000-2000-K2-K2-N-1	1~2	1000	0.7	15	1.45	200	200	N	0~+60	70*80*21
QCI2025X	1.3~4	400	0.4	20	1.25	100	20	SMA	-30~+70	20*25.4*13
QCI5050A	1.5~3	1500	0.7	17	1.4	100	10~100	SMA, N	-10~+60	50.8*49.5*19
QCI4040A	1.5~3.6	1800	0.7	17	1.4	100	30~100	SMA, N	0~+60	40*40*20
QCI2528C	2.5~6.5	3500	0.9	17	1.4	100	20	SMA, N	-30~+70	25.4*28*14
QCI3234A	2~4	2000	0.6	18	1.3	100	20	SMA, N	0~+60	32*34*21
QCI6237A	2~8	6000	1.5	13	1.8	20	5	SMA	0~+60	62*36.8*19.6
QCI1523C	3.6~7.2	1400	0.5	18	1.3	60	10	SMA	-10~+60	15*22.5*13.8
QCI1626B	3.7~5	1000	0.4	20	1.25	60	10	SMA	-10~+60	16*26.5*14.8
QCI2123B	4~8	4000	0.6	18	1.35	60	20	SMA	0~+60	21*22.5*15
QCI1622B	6~18	12000	1.5	11	1.9	30	10	SMA	0~+60	16*21.5*14
QCI1319C	7~15	4000	0.5	18	1.3	20	10	SMA	-10~+60	13*19*12.7
QCI2619C	8~12	4000	0.8	35	1.3	30	10	SMA	-10~+60	26*19*12.7
QCI1220C	9~16.5	2200	0.5	19	1.3	30	5	SMA	-30~+70	12*20*13
QCI-18000-26500-10-5-K	18~26.5	8500	0.7	16	1.4	10	5	2.92mm	-30~+70	12*20*13
QCI-26500-40000-5-1-K	26.5~40	13500	1.3	12	1.7	5	1	2.92mm	-30~+70	26*13*16.8
QCI-26500-40000-10-1-K	26.5~40	13500	1.7	12	1.8	10	1	2.92mm	-20~+70	13*26*22

Drop-In Isolators

How To Order:

QSIT-U-V-W-X-Y-Z

- Package: Coaxial - C, Drop-In - D, Surface Mount - S
- Serial Number
- Start Frequency (MHz)
- Stop Frequency (MHz)
- Direction Type: Clockwise - 1, Anticlockwise - 2
- Connector Type (Note: Drop-In and Surface Mount isolator do not include connectors, leave blank here.)
- Reverse Power (W)
- Forward Power (W)

Examples: To order a 3538X series Drop-In isolator, 700~730MHz, forward power 300W, reverse power 10W, clockwise, specify QDI3538X-700-730-K3-10-1.

The sizes in the following table do not include connectors and terminations. The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	FREQ. (GHz)	BW.* (MHz, max.)	IL. (dB, max.)	ISO. (dB, min.)	VSWR (max.)	FWD. Power (W, max.)	REV. Power (W)	Direction	TEMP. (°C)	Size* (mm)
QDI6060H	0.02~0.4	175	2	18	1.3	100	10~100	CW, ACW	-20~+70	60*60*25.5
QDI6466H	0.02~0.4	175	2	18	1.3	100	10~100	CW, ACW	-10~+60	64*66*22
QDI7070X	0.13~2	30	0.6	10	1.3	500	10~100	CW, ACW	-20~+70	70*70*15
QDI5050X	0.16~0.33	70	0.7	18	1.3	500	10~100	CW, ACW	-30~+70	50.8*50.8*14.8
QDI4545X	0.3~1.1	300	0.6	19	1.3	500	10~100	CW, ACW	-30~+70	45*45*13
QDI3538X	0.3~1.85	500	0.7	18	1.35	300	10~100	CW, ACW	-30~+70	35*38*11
QDI3546X	0.3~1.85	500	0.7	18	1.35	300	100	CW, ACW	-30~+70	35*46*11
QDI2525X	0.35~4	770	0.65	15	1.45	250	10~100	CW, ACW	-30~+70	25.4*25.4*10
QDI2532X	0.35~4	770	0.65	15	1.45	250	100	CW, ACW	-30~+70	25.4*31.7*10
QDI5032X	0.45~2.7	400	0.8	38	1.25	250	10~100	CW, ACW	-30~+70	50.8*31.7*10
QDI4020X	0.6~2.7	400	0.8	40	1.2	100	10~100	CW, ACW	-30~+70	40*20*8.6
QDI4027X	0.6~2.7	400	0.8	40	1.2	100	10~100	CW, ACW	-30~+70	40*27.5*8.6
QDI2027X	0.6~3.6	900	0.5	18	1.35	150	100	CW, ACW	-30~+70	20*27.5*8.6
QDI2020X	0.6~4	900	0.5	18	1.35	150	20	CW, ACW	-30~+70	20*20*8.6
QDI1919X	0.8~4.3	900	0.5	18	1.35	100	20	CW, ACW	-30~+70	19*19*8.6
QDI1925X	0.8~4.3	900	0.5	18	1.35	100	100	CW, ACW	-30~+70	19*25.4*8.6
QDI6466K	0.95~2	1050	0.65	16	1.4	100	10~100	CW, ACW	0~+60	64*66*26
QDI5050A	1.5~3	1500	0.7	17	1.4	100	10~100	CW, ACW	-10~+60	50.8*49.5*19
QDI1313M	1.7~6	800	0.45	18	1.3	60	20	CW, ACW	-30~+70	12.7*12.7*7.2
QDI1313T	1.7~6	800	0.45	18	1.3	60	20	CW, ACW	-30~+70	12.7*12.7*7.2
QDI3234A	2~4	2000	0.6	18	1.3	100	10~100	CW, ACW	-10~+60	32*34*21
QDI3030B	2~6	4000	1.7	12	1.6	20	20	CW, ACW	-40~+70	30.5*30.5*15
QDI1626D	3.7~5	1000	0.5	18	1.3	100	10	CW, ACW	-30~+70	16*26*10.5
QDI2528C	3~6	3500	0.8	16	1.4	60	20	CW, ACW	-10~+60	25.4*28*14
QDI2123B	4~8	4000	0.6	18	1.35	60	20	CW, ACW	0~+60	21*22.5*15
QDI1220D	5~7	800	0.5	18	1.3	80	10	CW, ACW	-30~+70	12*20*9.5
QDI1623D	5~7	800	0.5	18	1.3	100	10	CW, ACW	-30~+70	16*23*9.7
QDI1622B	6~18	12000	1.5	11	1.9	30	10	CW, ACW	0~+60	16*21.5*14
QDI0915D	7~18	6000	0.6	17	1.35	30	10	CW, ACW	-30~+70	8.9*15*7.8

Surface Mount Isolators

How To Order:

QSIT-U-V-W-X-Y-Z

- Package: Coaxial - C, Drop-In - D, Surface Mount - S
- Serial Number
- Start Frequency (MHz)
- Stop Frequency (MHz)
- Direction Type: Clockwise - 1, Anticlockwise - 2
- Connector Type (Note: Drop-In and Surface Mount isolator do not include connectors, leave blank here.)
- Reverse Power (W)
- Forward Power (W)

Examples: To order a 12R5 series surface mount isolator, 790~810MHz, forward power 50W, reverse power 10W, clockwise, specify QSI12R5-790-810-50-10-1

The bandwidth column represents the maximum bandwidth that can be achieved in the corresponding frequency range of the series.

Part Number	Frequency (GHz)	Bandwidth* (MHz, max.)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	FWD. Power (W, max.)	REV. Power (W)	Direction	Temperature (°C)	Size (mm)
QSI12R5	0.79~5.9	600	0.6	17	1.35	50	10	CW, ACW	-40~+85	Φ12.5×7

Coaxial Adapters

Qualwave supplies various high performance coaxial adapters which are widely used in many areas. The adapters cover frequency range DC~110GHz. They are high reliable and durable. Mating durability is up to 5000 cycles.

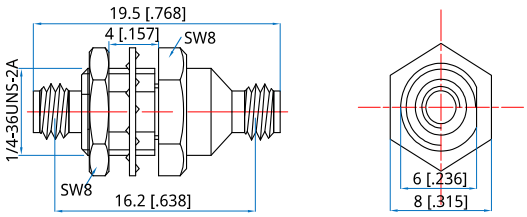
Features: DC~110GHz, Low VSWR, High Durable, High Reliable; **Applications:** Laboratory Test, Radar, Instrumentation.

In Series Coaxial Adapters

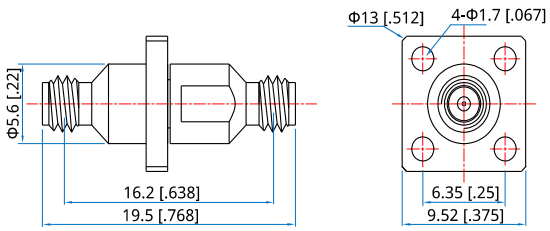
1.0mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA11-MM QA11-MF QA11-FF	DC~110	1.35	1.0mm (m) to 1.0mm (m) 1.0mm (m) to 1.0mm (f) 1.0mm (f) to 1.0mm (f)	Passivated stainless steel or Gold plated beryllium copper	-55~+85
QA11H-FF	DC~110	1.35	1.0mm (f) to 1.0mm (f), bulk head	Passivated stainless steel or Gold plated beryllium copper	-55~+85
QA11L-FF	DC~110	1.35	1.0mm (f) to 1.0mm (f), flange mout	Passivated stainless steel or Gold plated beryllium copper	-55~+85

QA11H-FF



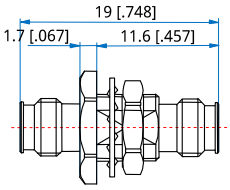
QA11L-FF



1.35mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA55-MM QA55-MF QA55-FF	DC~90	1.3	1.35mm (m) to 1.35mm (m) 1.35mm (m) to 1.35mm (f) 1.35mm (f) to 1.35mm (f)	Passivated stainless steel	-55~+165
QA55H-FF	DC~90	1.3	1.35mm (f) to 1.35mm (f), bulk head	Passivated stainless steel	-55~+165

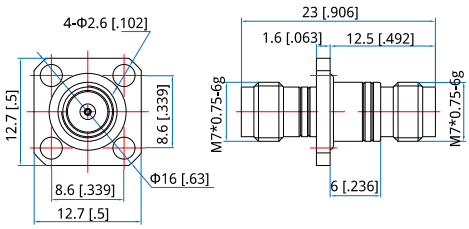
QA55H-FF



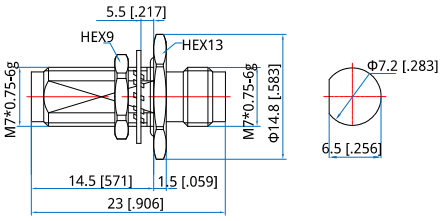
1.85mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAVV-MM QAVV-MF QAVV-FF	DC~67	1.25	1.85mm (m) to 1.85mm (m) 1.85mm (m) to 1.85mm (f) 1.85mm (f) to 1.85mm (f)	Passivated stainless steel	-55~+125
QAVVR-MM QAVVR-MF QAVVR-FF	DC~67	1.25	1.85mm (m) to 1.85mm (m), right angle 1.85mm (m) to 1.85mm (f), right angle 1.85mm (f) to 1.85mm (f), right angle	Passivated stainless steel	-55~+125
QAVVL-FF	DC~67	1.25	1.85mm (f) to 1.85mm (f), flange mout	Passivated stainless steel	-55~+125
QAVVH-FF	DC~67	1.25	1.85mm (f) to 1.85mm (f), bulk head	Passivated stainless steel	-55~+125

QAVVL-FF



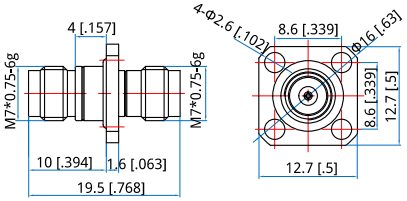
QAVVH-FF



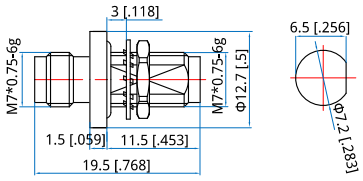
2.4mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA22-MM QA22-MF QA22-FF	DC~50	1.25	2.4mm (m) to 2.4mm (m) 2.4mm (m) to 2.4mm (f) 2.4mm (f) to 2.4mm (f)	Passivated stainless steel	-60~+165
QA22R-MM QA22R-MF QA22R-FF	DC~50	1.25	2.4mm (m) to 2.4mm (m), right angle 2.4mm (m) to 2.4mm (f), right angle 2.4mm (f) to 2.4mm (f), right angle	Passivated stainless steel	-60~+165
QA22L-FF	DC~50	1.25	2.4mm (f) to 2.4mm (f), flange mout	Passivated stainless steel	-60~+165
QA22H-FF	DC~50	1.25	2.4mm (f) to 2.4mm (f), bulk head	Passivated stainless steel	-60~+165

QA22L-FF



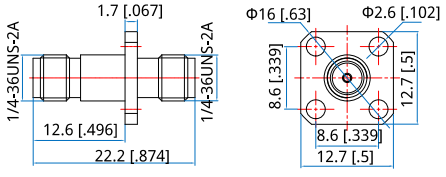
QA22H-FF



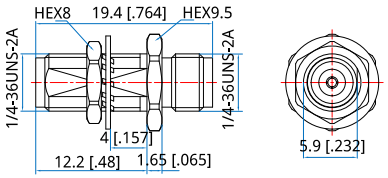
2.92mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKK-MM QAKK-MF QAKK-FF	DC~40	1.25	2.92mm (m) to 2.92mm (m) 2.92mm (m) to 2.92mm (f) 2.92mm (f) to 2.92mm (f)	Passivated stainless steel	-60~+165
QAKKR-MM QAKKR-MF QAKKR-FF	DC~40	1.25	2.92mm (m) to 2.92mm (m), right angle 2.92mm (m) to 2.92mm (f), right angle 2.92mm (f) to 2.92mm (f), right angle	Passivated stainless steel	-60~+165
QAKKL-FF	DC~40	1.25	2.92mm (f) to 2.92mm (f), flange mout	Passivated stainless steel	-60~+165
QAKKH-FF	DC~40	1.25	2.92mm (f) to 2.92mm (f), bulk head	Passivated stainless steel	-60~+165

QAKKL-FF



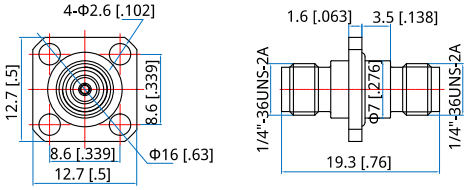
QAKKH-FF



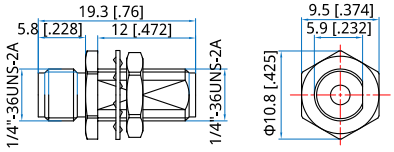
3.5mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA33-MM QA33-MF QA33-FF	DC~33	1.15	3.5mm (m) to 3.5mm (m) 3.5mm (m) to 3.5mm (f) 3.5mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+125
QA33R-MM QA33R-MF QA33R-FF	DC~33	1.25	3.5mm (m) to 3.5mm (m), right angle 3.5mm (m) to 3.5mm (f), right angle 3.5mm (f) to 3.5mm (f), right angle	Passivated stainless steel	-55~+125
QA33L-FF	DC~33	1.15	3.5mm (f) to 3.5mm (f), flange mout	Passivated stainless steel	-55~+125
QA33H-FF	DC~33	1.25	3.5mm (f) to 3.5mm (f), bulk head	Passivated stainless steel	-55~+125

QA33L-FF



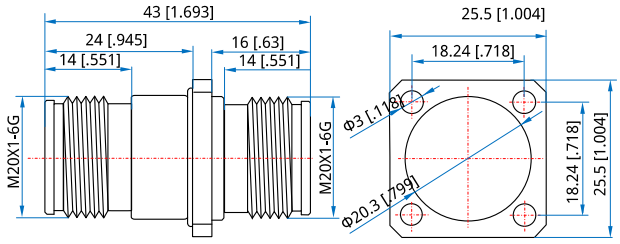
QA33H-FF



4.3-10 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA44-MM QA44-MF QA44-FF	DC~6	1.2	4.3-10 (m) to 4.3-10 (m) 4.3-10 (m) to 4.3-10 (f) 4.3-10 (f) to 4.3-10 (f)	Ternary alloy plated brass	-45~+88
QA44R-MF	DC~6	1.2	4.3-10 (m) to 4.3-10 (m), right angle	Ternary alloy plated brass	-45~+88
QA44L-FF	DC~6	1.2	4.3-10 (m) to 4.3-10 (f), flange mout	Nickel plated brass	-45~+125

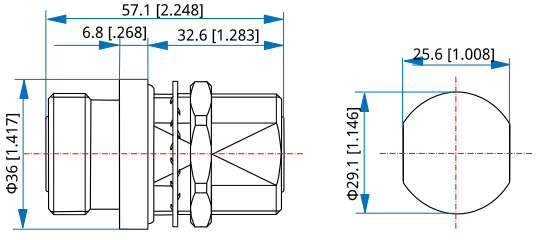
QA44L-FF



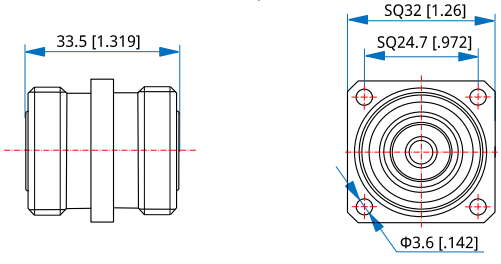
7/16 DIN Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA77-MF	DC~3	1.15	7/16 DIN (m) to 7/16 DIN (f)	Ternary alloy plated brass	-45~+85
QA77-MM	DC~6	1.2	7/16 DIN (m) to 7/16 DIN (m)		-45~+125
QA77-FF	DC~6	1.2	7/16 DIN (f) to 7/16 DIN (f)		-45~+85
QA77H-FF	DC~6	1.25	7/16 DIN (f) to 7/16 DIN (f), bulk head	Ternary alloy plated brass	-45~+85
QA77R-MF QA77R-MM	DC~3	1.15	7/16 DIN (m) to 7/16 DIN (f), right angle 7/16 DIN (f) to 7/16 DIN (f), right angle	Ternary alloy plated brass	-45~+85
QA77L-FF	DC~6	1.2	7/16 DIN (f) to 7/16 DIN (f), flange mout	Ternary alloy plated brass	-45~+125
QA777-FMF QA777-FFF	DC~3	-	7/16 DIN (f) to 7/16 DIN (m) to7/16DIN(f), tee 7/16 DIN (f) to 7/16 DIN (f) to7/16DIN(f), tee	Ternary alloy plated brass	-45~+85

QA77H-FF



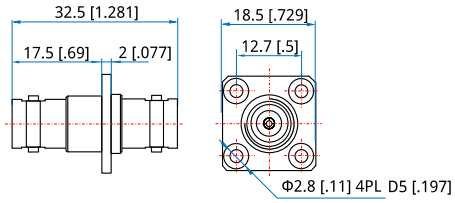
QA77L-FF



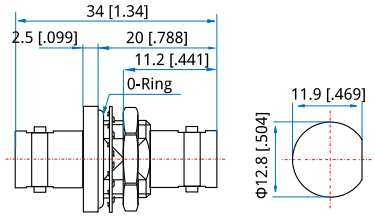
BNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QABB-MM	DC~4	1.15	BNC (m) to BNC (m)	Ternary alloy plated brass or Nickel plated brass	-55~+125
QABB-FF			BNC (f) to BNC (f)		
QABB-MF			BNC (m) to BNC (f)		
QABBB-FFF	DC~1	1.15	BNC (f) to BNC (f) to BNC (f), tee	Ternary alloy plated brass or Nickel plated brass	-55~+125
QABBB-FMF			BNC (f) to BNC (m) to BNC (f), tee		
QABBR-MF	DC~4~3	1.45	BNC (m) to BNC (f), right angle	Ternary alloy plated brass or Nickel plated brass	-55~+125
QABBL-FF	DC~4	1.15	BNC (f) to BNC (f), flange mout	Ternary alloy plated brass or Nickel plated brass	-55~+125
QABBH-FF	DC~4	1.15	BNC (f) to BNC (f), bulk head	Ternary alloy plated brass or Nickel plated brass	-55~+125

QABBL-FF



QABBH-FF



L16 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAL1L1-MM	DC~18	1.2	L16 (m) to L16 (m)	Passivated stainless steel	-55~+165
QAL1L1-FF			L16 (f) to L16 (f)		
QAL1L1-MF			L16 (m) to L16 (f)		

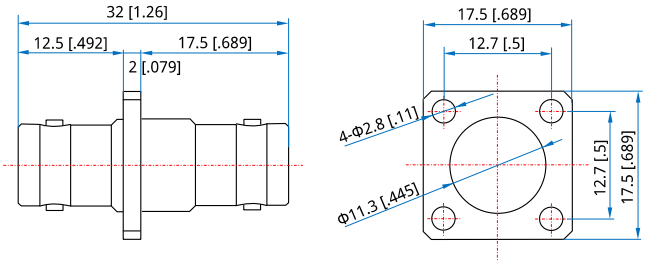
MCX Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAMM-MM	DC~6	1.2	MCX (m) to MCX (m)	Gold plated brass	-55~+165
QAMM-FF			MCX (f) to MCX (f)		
QAMM-MF			MCX (m) to MCX (f)		

MHV Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAM4M4L-FF	DC~0.3	1.15	MHV (f) to MHV (f), flange mout	Ternary alloy plated brass	-45~+125
QAM4M4H-FF	DC~0.3	-	MHV (f) to MHV (f), bulk head	Ternary alloy plated brass	-45~+125

QAM4M4L-FF



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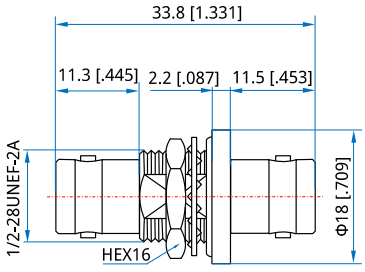


MMCX Series

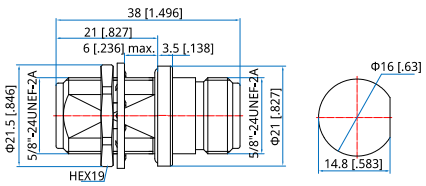
Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAXX-MM	DC~6	1.2	MMCX (m) to MMCX (m)	Gold plated brass	-55~+165
QAXX-FF		1.2	MMCX (f) to MMCX (f)		
QAXX-MF		1.5	MMCX (m) to MMCX (f)		

N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANN-MM	DC~18	1.15	N (m) to N (m)	Passivated stainless steel	-55~+85
QANN-MF			N (m) to N (f)		
QANN-FF			N (f) to N (f)		

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANNR-MM QANNR-MF QANNR-FF	DC~18	1.15	N (m) to N (m), right angle N (m) to N (f), right angle N (f) to N (f), right angle	Passivated stainless steel	-55~+85
QANNH-FF	DC~18	1.15	N (f) to N (f), bulk head	Passivated stainless steel	-55~+85
QANNL-FF QANNL-MF	DC~18	1.2	N (f) to N (f), flange mout N (m) to N (f), flange mout	Passivated stainless steel	-55~+85
QANN-MM-B	DC~18	1.25	N (m) to N (m)		
QANN-MF-B	DC~6	1.15	N (m) to N (f)	Ternary alloy plated brass or Nickel plated brass	-55~+165
QANN-FF-B	DC~6	1.15	N (f) to N (f)		
QANNR-MF-B	DC~18	1.25	N (m) to N (f), right angle	Ternary alloy plated brass or Nickel plated brass	-55~+165
QANNL-FF-B	DC~6	1.15	N (f) to N (f), flange mout	Ternary alloy plated brass or Nickel plated brass	-55~+165
QANNH-FF-B	DC~6	1.15	N (f) to N (f), bulk head	Ternary alloy plated brass or Nickel plated brass	-55~+165
QANNN-FFF-B	DC~3	1.15	N (f) to N (f) to N (f), tee	Ternary alloy plated brass or Nickel plated brass	-55~+165

QANNH-FF



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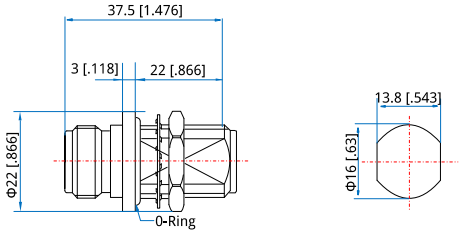
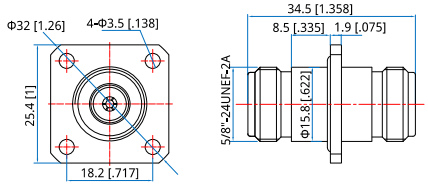


QANNL-FF



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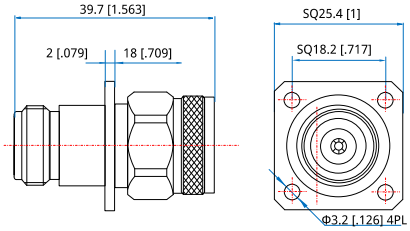

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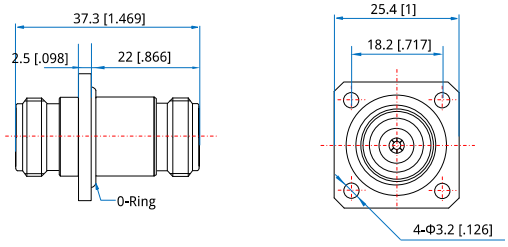


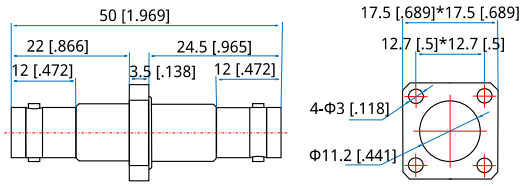
SC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAEE-MM QAEE-MF QAEE-FF	DC~11	1.25	SC (m) to SC (m) SC (m) to SC (f) SC (f) to SC (f)	Passivated stainless steel	-55~+165
QAEER-MF	DC~11	1.25	SC (m) to SC (f), right angle	Passivated stainless steel	-55~+165

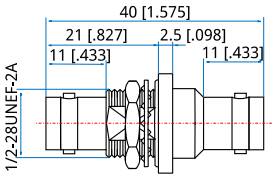
SHV Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAS1S1-MM QAS1S1-FF	DC~0.3	-	SHV (m) to SHV (m) SHV (f) to SHV (f)	Nickel plated brass	-45~+125
QAS1S1L-MM	DC~0.3	-	SHV (m) to SHV (m), flange mout	Nickel plated brass	-45~+125
QAS1S1H-MM	DC~0.3	-	SHV (m) to SHV (m), bulk head	Nickel plated brass	-45~+125

QAS1S1L-MM



QAS1S1H-MM

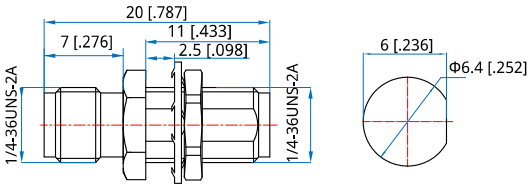


SMA Series

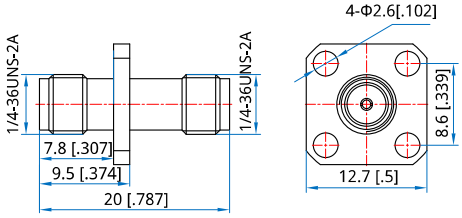
Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASS-MM QASS-MF QASS-FF	DC~26.5	1.3	SMA (m) to SMA (m) SMA (m) to SMA (f) SMA (f) to SMA (f)	Passivated stainless steel	-55~+85
QASSR-MM QASSR-MF QASSR-FF	DC~18	1.3	SMA (m) to SMA (m), right angle SMA (m) to SMA (f), right angle SMA (f) to SMA (f), right angle	Passivated stainless steel	-55~+85
QASSH-FF	DC~18	1.25	SMA (f) to SMA (f), bulk head	Passivated stainless steel	-55~+85
QASSL-FF	DC~26.5	1.2	SMA (f) to SMA (f), flange mout	Passivated stainless steel	-55~+85
QASS-MRPM QASS-MRPMRP QASS-MRPF QASS-MFRP QASS-MRPFRP QASS-FRPF QASS-FRPFRP	DC~18	1.3	Reversed polarity SMA (m) to SMA (m) Reversed polarity SMA (m) to Reversed polarity SMA (m) Reversed polarity SMA (m) to SMA (f) SMA (m) to Reversed polarity SMA (f) Reversed polarity SMA (m) to Reversed polarity SMA (f) Reversed polarity SMA (f) to SMA (f) Reversed polarity SMA (f) to Reversed polarity SMA (f)	Passivated stainless steel	-55~+85
QASS-MM-A QASS-MF-A QASS-FF-A	DC~26.5	1.2	SMA (m) to SMA (m), high performance SMA (m) to SMA (f), high performance SMA (f) to SMA (f), high performance	Passivated stainless steel	-55~+85
QASSR-MM-A QASSR-MF-A QASSR-FF-A	DC~18	1.2	SMA (m) to SMA (m), right angle, high performance SMA (m) to SMA (f), right angle, high performance SMA (f) to SMA (f), right angle, high performance	Passivated stainless steel	-55~+85
QASSH-MF-A QASSH-FF-A	DC~26.5	1.2	SMA (m) to SMA (f), bulk head, high performance SMA (f) to SMA (f), bulk head, high performance	Passivated stainless steel	-55~+85
QASSL-FF-A	DC~26.5	1.2	SMA (f) to SMA (f), flange mout, high performance	Passivated stainless steel	-55~+85
QASS-MRPM-A QASS-MRPMRP-A QASS-MRPF-A QASS-MFRP-A QASS-MRPFRP-A QASS-FRPF-A QASS-FRPFRP-A	DC~18	1.2	Reversed polarity SMA (m) to SMA (m), high performance Reversed polarity SMA (m) to Reversed polarity SMA (m), high performance Reversed polarity SMA (m) to SMA (f), high performance SMA (m) to Reversed polarity SMA (f), high performance Reversed polarity SMA (m) to Reversed polarity SMA (f), high performance Reversed polarity SMA (f) to SMA (f), high performance Reversed polarity SMA (f) to Reversed polarity SMA (f), high performance	Passivated stainless steel	-55~+85
QASS-MM-B QASS-MF-B QASS-FF-B	DC~26.5	1.2	SMA (m) to SMA (m) SMA (m) to SMA (f) SMA (f) to SMA (f)	Gold plated brass	-55~+85
QASSR-MM-B QASSR-MF-B QASSR-FF-B	DC~18	1.2	SMA (m) to SMA (m), right angle SMA (m) to SMA (f), right angle SMA (f) to SMA (f), right angle	Gold plated brass	-55~+85
QASSL-MF-B QASSL-FF-B	DC~26.5	1.2	SMA (m) to SMA (f), flange mout SMA (f) to SMA (f), flange mout	Gold plated brass	-55~+85
QASSH-FF-B	DC~26.5	1.2	SMA (m) to SMA (f), bulk head	Gold plated brass	-55~+85
QASS-MRPM-B QASS-MRPMRP-B QASS-MRPF-B QASS-MFRP-B QASS-MRPFRP-B QASS-FRPF-B QASS-FRPFRP-B	DC~18GHz	1.2	Reversed polaritySMA(m) to SMA (m) Reversed polarity SMA (m) to Reversed polarity SMA (m) Reversed polarity SMA (m) to SMA (f) SMA (m) to Reversed polarity SMA (f) Reversed polarity SMA (m) to Reversed polarity SMA (f) Reversed polarity SMA (f) to SMA (f) Reversed polarity SMA (f) to Reversed polarity SMA (f)	Gold plated brass	-55~+85

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASS-MM-B6 QASS-MF-B6 QASS-FF-B6	DC~6	1.15	SMA (m) to SMA (m) SMA (m) to SMA (f) SMA (f) to SMA (f)	Gold plated brass	-55~+165
QASSH-FF-B6	DC~6	1.15	SMA (f) to SMA (f), bulk head	Gold plated brass	-55~+165
QASSL-FF-B6	DC~6	1.15	SMA (f) to SMA (f), flange mout	Gold plated brass	-55~+165
QASS-MMRP-B6 QASS-MRPMRP-B6 QASS-MFRP-B6 QASS-MRPFRP-B6 QASS-FFRP-B6 QASS-FRPFRP-B6	DC~6	1.15	SMA (m) to Reversed polarity SMA (m) Reversed polarity SMA (m) to Reversed polarity SMA (m) SMA (m) to Reversed polarity SMA (f) Reversed polarity SMA (m) to Reversed polarity SMA (f) SMA (f) to Reversed polarity SMA (f) Reversed polarity SMA (f) to Reversed polarity SMA (f)	Gold plated brass	-55~+165
QASSR-MM-B6 QASSR-MF-B6 QASSR-FF-B6	DC~6	1.2	SMA (m) to SMA (m), right angle SMA (m) to SMA (f), right angle SMA (f) to SMA (f), right angle	Gold plated brass	-55~+165
QASSS-FMF-B6 QASSS-FFF-B6	DC~1 DC~6	1.15 1.3	SMA (f) to SMA (m) toSMA (f), tee SMA (f) to SMA (f) toSMA (f), tee	Gold plated brass	-55~+165

QASSH-FF



QASSL-FF



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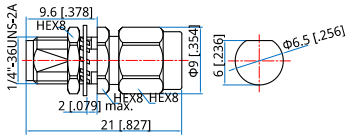

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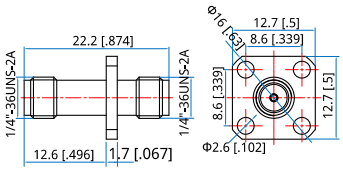

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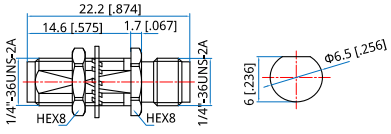

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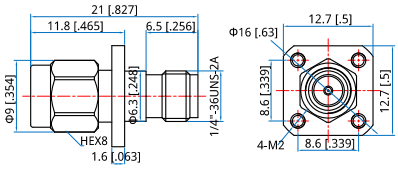

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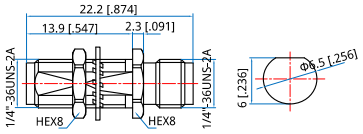

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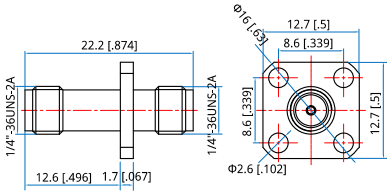

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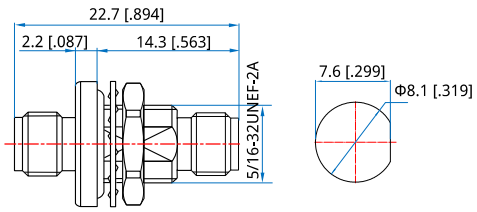

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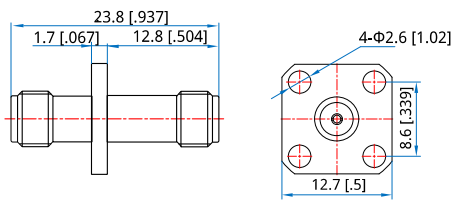
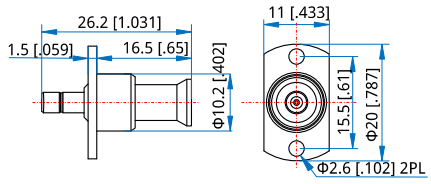


SMB Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QADD-MM	DC~4	1.15	SMB (m) to SMB (m)	Gold plated brass	-55~+165
QADD-FF			SMB (f) to SMB (f)		
QADD-MF			SMB (m) to SMB (f)		
QADDL-MF	DC~6	1.2	SMB (m) to SMB (f), flange mout	Passivated stainless steel	-55~+165

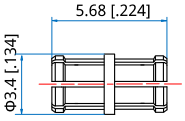
QADDL-MF



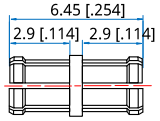
SMP Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAPP-MM	DC~18	1.3	SMP (m) to SMP (m)	Passivated stainless steel or Gold plated brass or Gold plated beryllium copper	-55~+125
QAPP-MF	DC~18	1.35	SMP (m) to SMP (f)		
QAPP-FF	DC~6	1.3	SMP (f) to SMP (f)		
QAPP-FF-1	DC~18	1.3	SMP (f) to SMP (f)		
QAPP-FF-2	DC~18	1.35	SMP (f) to SMP (f)		
QAPP-FF-3	DC~18	1.3	SMP (f) to SMP (f)		
QAPPL-MM QAPPL-MM-1	DC~18	1.3	SMP (m) to SMP (m), flange mout	Passivated stainless steel or Gold plated brass or Gold plated beryllium copper	-55~+125

QAPP-FF



QAPP-FF-1



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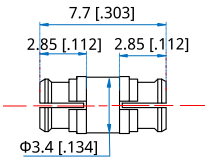

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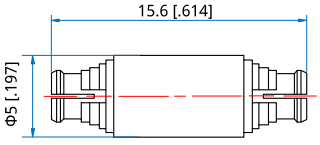
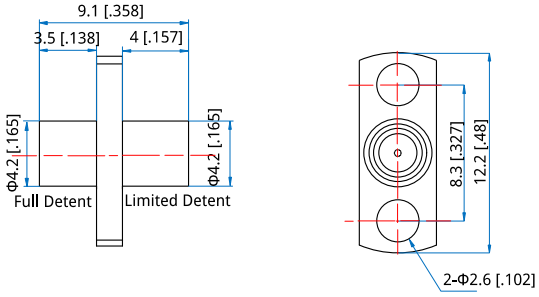


QAPPL-MM



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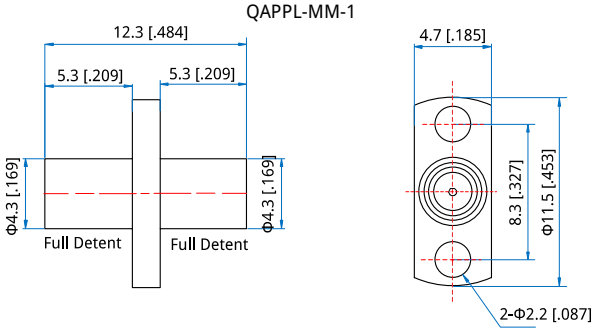
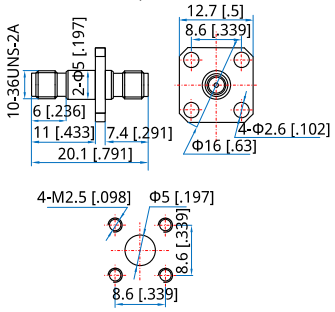


SSMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAAA-MM	DC~26.5	1.2	SSMA (m) to SSMA (m)	Passivated stainless steel	-55~+165
QAAA-FF	DC~26.5		SSMA (f) to SSMA (f)		
QAAA-MF	DC~18		SSMA (m) to SSMA (f)		
QAAAL-FF	DC~26.5	1.2	SSMA (f) to SSMA (f), flange mout	Passivated stainless steel	-55~+165

QAAAL-FF



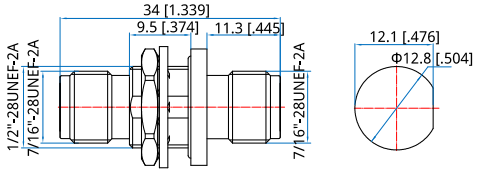
SSMP Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAGG-FF	DC~18	1.3	SSMP (f) to SSMP (f)	Gold plated beryllium copper	-55~+165
QAGG-FF-1	DC~40	1.3			-55~+125
QAGG-FF-2	DC~30	1.35			-55~+125

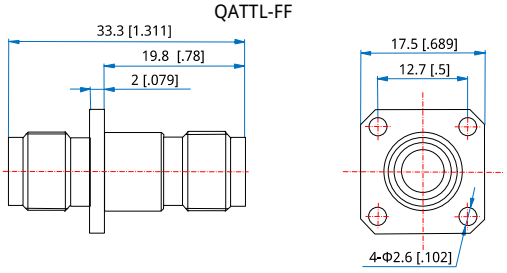
TNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QATT-MM	DC~18	1.2	TNC (m) to TNC (m)	Passivated stainless steel	-55~+165
QATT-MF			TNC (m) to TNC (f)		
QATT-FF			TNC (f) to TNC (f)		
QATTH-FF	DC~11	1.25	TNC (f) to TNC (f), bulk head	Passivated stainless steel	-55~+165
QATTL-FF	DC~18	1.25	TNC (f) to TNC (f), flange mout	Passivated stainless steel	-55~+165
QATTL-FF-B	DC~6	1.15		Ternary alloy plated brass	
QATTT-FMF	DC~4	-	TNC (f) to TNC (m) toTNC (f), tee	Ternary alloy plated brass	-45~+125
QATTT-FFF			TNC (f) to TNC (f) to TNC (f), tee		

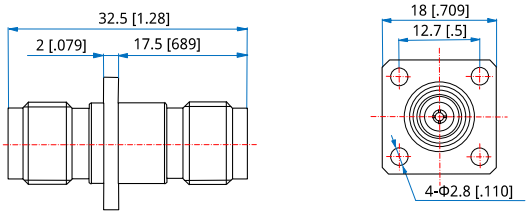
QATTH-FF



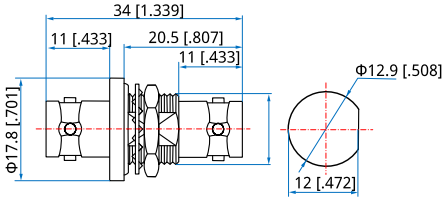
QATTL-FF



QATTL-FF-B



QAB1B1H-FF



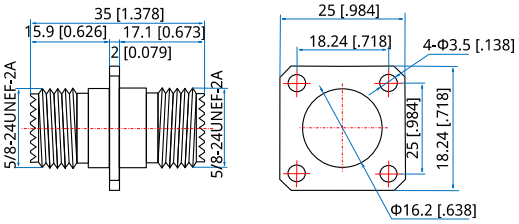
TRB Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAB1B1-MM	DC~3	1.2	TRB (m) to TRB (m)	Ternary alloy plated brass	-50~+125
QAB1B1-FF			TRB (f) to TRB (f)	Nickel plated brass	
QAB1B1H-FF	DC~3	1.2	TRB (f) to TRB (f), bulk head	Ternary alloy plated brass	-50~+125
QAB1B1B1-FFF	DC~3	1.2	TRB (f) to TRB (f) to TRB (f), tee	Nickel plated brass	-50~+125
QAB1B1B1-FMF			TRB (f) to TRB (m) to TRB (f), tee		

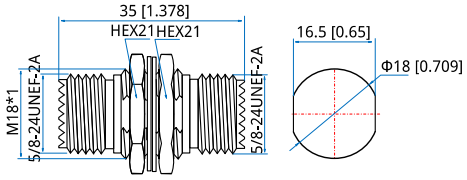
UHF Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAZZ-MM QAZZ-MF QAZZ-FF	DC~1	1.2	UHF (m) to UHF (m) UHF (m) to UHF (f) UHF (f) to UHF (f)	Nickel plated brass	-45~+125
QAZZL-FF	DC~1	1.2	UHF (f) to UHF (f), flange mout	Nickel plated brass	-45~+125
QAZZH-FF-1 QAZZH-FF-2	DC~1	1.2	UHF (f) to UHF (f), bulk head UHF (f) to UHF (f), bulk head	Nickel plated brass	-45~+125
QAZZR-MF	DC~1	-	UHF (m) to UHF (f), right angle	Nickel plated brass	-45~+125

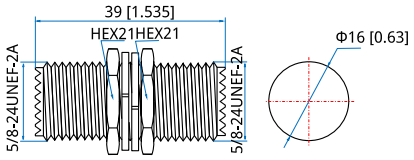
QAZZL-FF



QAZZH-FF-1



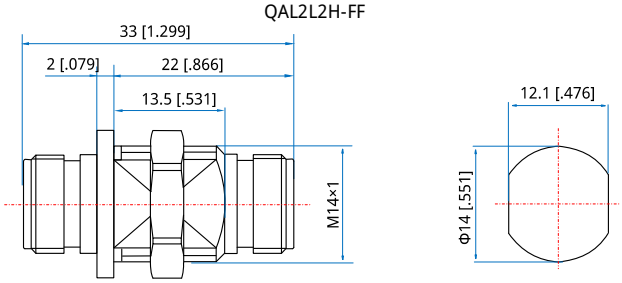
QAZZH-FF-2



Other Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAL2L2H-FF	DC~6	1.2	L12 (f) to L12 (f), bulk head	Ternary alloy plated brass	-55~+165
QAUUL-MM	DC~6	1.2	SSMB (m) to SSMB (m), flange mout	Gold plated brass	-55~+165
QAYYL-FF	DC~6	1.3	HN (f) to HN (f), flange mout	Ternary alloy plated brass	-55~+165
QAFFH-FF	DC~1	1.3	F (f) to F (f), bulk head	Nickel plated brass	-55~+165

QAL2L2H-FF



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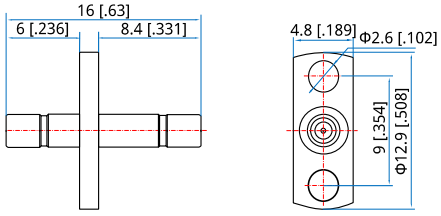

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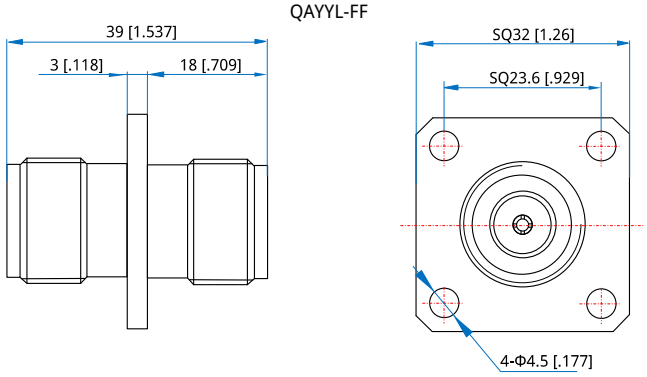

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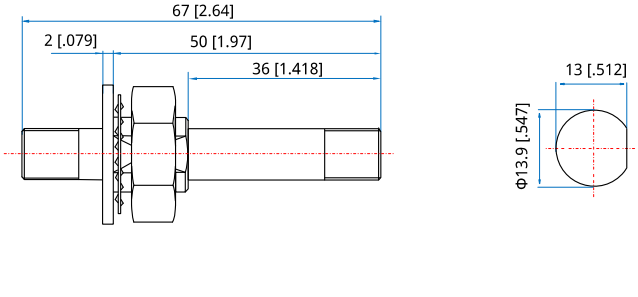


Between Series Coaxial Adapters

1.0mm to 1.85mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA1V-MM QA1V-MF QA1V-FF QA1V-FM	DC~67	1.3	1.0mm (m) to 1.85mm (m) 1.0mm (m) to 1.85mm (f) 1.0mm (f) to 1.85mm (f) 1.0mm (f) to 1.85mm (m)	Passivated stainless steel	-55~+165

1.85mm to 2.4mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAV2-MM QAV2-MF QAV2-FM QAV2-FF	DC~50	1.2	1.85mm (m) to 2.4mm (m) 1.85mm (m) to 2.4mm (f) 1.85mm (f) to 2.4mm (m) 1.85mm (f) to 2.4mm (f)	Passivated stainless steel	-55~+165
QAV2R-MM QAV2R-MF QAV2R-FM QAV2R-FF	DC~50	1.25	1.85mm (m) to 2.4mm (m), right angle 1.85mm (m) to 2.4mm (f), right angle 1.85mm (f) to 2.4mm (m), right angle 1.85mm (f) to 2.4mm (f), right angle	Passivated stainless steel	-55~+165

1.85mm to 2.92mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAVK-MM QAVK-MF QAVK-FM QAVK-FF	DC~40	1.15	1.85mm (m) to 2.92mm (m) 1.85mm (m) to 2.92mm (f) 1.85mm (f) to 2.92mm (m) 1.85mm (f) to 2.92mm (f)	Passivated stainless steel	-55~+165
QAVKR-MM QAVKR-MF QAVKR-FM QAVKR-FF	DC~40	1.25	1.85mm (m) to 2.92mm (m), right angle 1.85mm (m) to 2.92mm (f), right angle 1.85mm (f) to 2.92mm (m), right angle 1.85mm (f) to 2.92mm (f), right angle	Passivated stainless steel	-55~+165

1.85mm to 3.5mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAV3-MM QAV3-MF QAV3-FM QAV3-FF	DC~33	1.15	1.85mm (m) to 3.5mm (m) 1.85mm (m) to 3.5mm (f) 1.85mm (f) to 3.5mm (m) 1.85mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+125

1.85mm to SSMP Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAVG-MM QAVG-FF QAVG-MF QAVG-FM	DC~67	1.3	1.85mm (m) to SSMP (m) 1.85mm (f) to SSMP (f) 1.85mm (m) to SSMP (f) 1.85mm (f) to SSMP (m)	Passivated stainless steel & Gold plated beryllium copper or Passivated stainless steel	-55~+125

2.4mm to 2.92mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2K-MM QA2K-MF QA2K-FM QA2K-FF	DC~40	1.25	2.4mm (m) to 2.92mm (m) 2.4mm (m) to 2.92mm (f) 2.4mm (f) to 2.92mm (m) 2.4mm (f) to 2.92mm (f)	Passivated stainless steel	-60~+165
QA2KR-MM QA2KR-MF QA2KR-FM QA2KR-FF	DC~40	1.25	2.4mm (m) to 2.92mm (m), right angle 2.4mm (m) to 2.92mm (f), right angle 2.4mm (f) to 2.92mm (m), right angle 2.4mm (f) to 2.92mm (f), right angle	Passivated stainless steel	-60~+165

2.4mm to 3.5mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA23-MM QA23-MF QA23-FM QA23-FF	DC~33	1.15	2.4mm (m) to 3.5mm (m) 2.4mm (m) to 3.5mm (f) 2.4mm (f) to 3.5mm (m) 2.4mm (f) to 3.5mm (f)	Passivated stainless steel	-60~+165

2.4mm to 7.0mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2J-M QA2J-F	DC ~18	1.25	2.4mm (m) to 7.0mm 2.4mm (f) to 7.0mm	Passivated stainless steel	-55~+165

2.4mm to N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2N-MM QA2N-FF QA2N-MF QA2N-FM	DC ~18	1.2	2.4mm (m) to N (m) 2.4mm (f) to N (f) 2.4mm (m) to N (f) 2.4mm (f) to N (m)	Passivated stainless steel	-55~+165

2.4mm to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2S-MM QA2S-FF QA2S-MF QA2S-FM	DC~26.5	1.2	2.4mm (m) to SMA (m) 2.4mm (f) to SMA (f) 2.4mm (m) to SMA (f) 2.4mm (f) to SMA (m)	Passivated stainless steel	-55~+165

2.4mm to SMP Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2P-MM	DC~40	1.5	2.4mm (m) to SMP (m)	Passivated stainless steel or Gold plated beryllium copper	-50~+85
QA2P-FF		1.5	2.4mm (f) to SMP (f)		-50~+85
QA2P-MF		1.35	2.4mm (m) to SMP (f)		-55~+165
QA2P-FM		1.35	2.4mm (f) to SMP (m)		-55~+165

2.4mm to TNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA2T-MM QA2T-FF QA2T-MF QA2T-FM	DC ~18	1.3	2.4mm (m) to TNC (m) 2.4mm (f) to TNC (f) 2.4mm (m) to TNC (f) 2.4mm (f) to TNC (m)	Passivated stainless steel	-55~+165

2.92mm to 3.5mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAK3-MM QAK3-FF QAK3-MF QAK3-FM	0.01~26.5	1.15	2.92mm (m) to 3.5mm (m) 2.92mm (f) to 3.5mm (f) 2.92mm (m) to 3.5mm (f) 2.92mm (f) to 3.5mm (m)	Passivated stainless steel	-55~+165

2.92mm to 7.0mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKJ-M QAKJ-F	DC ~18	1.25	2.92mm (m) to 7.0mm 2.92mm (f) to 7.0mm	Passivated stainless steel	-55~+165

2.92mm to N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKN-MM QAKN-MF QAKN-FM QAKN-FF	DC ~18	1.15	2.92mm (m) to N (m) 2.92mm (m) to N (f) 2.92mm (f) to N (m) 2.92mm (f) to N (f)	Passivated stainless steel	-55~+125

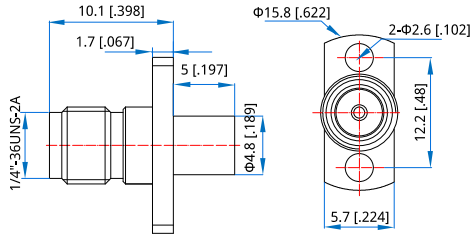
2.92mm to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKS-FF QAKS-MM QAKS-MF QAKS-FM	DC~27	1.15	2.92mm (f) to SMA (f) 2.92mm (m) to SMA (m) 2.92mm (m) to SMA (f) 2.92mm (f) to SMA (m)	Polished & Passivated stainless steel	-

2.92mm to SMP Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKP-MM QAKP-MF QAKP-FM QAKP-FF	DC~40	1.25	2.92mm (m) to SMP (m) 2.92mm (m) to SMP (f) 2.92mm (f) to SMP (m) 2.92mm (f) to SMP (f)	Passivated stainless steel or Gold plated beryllium copper	-55~+165
QAKPL-FM	DC~40	1.25	2.92mm (f) to SMP (m), flange mout	Passivated stainless steel or Gold plated beryllium copper	-55~+165

QAKPL-FM



2.92mm to SSMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAKA-MM QAKA-MF QAKA-FM QAKA-FF	DC~40	1.2	2.92mm (m) to SSMA (m) 2.92mm (m) to SSMA (f) 2.92mm (f) to SSMA (m) 2.92mm (f) to SSMA (f)	Passivated stainless steel	-55~+125

3.5mm to 7.0mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA3J-M QA3J-F	DC ~18	1.25	3.5mm (m) to 7.0mm 3.5mm (f) to 7.0mm	Passivated stainless steel	-55~+165

3.5mm to N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA3N-MM QA3N-FM QA3N-MF QA3N-FF	DC ~18	1.2	3.5mm (m) to N (m) 3.5mm (f) to N (m) 3.5mm (m) to N (f) 3.5mm (f) to N (f)	Passivated stainless steel	-55~+165

3.5mm to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA3S-MM QA3S-FF QA3S-MF QA3S-FM	DC~27	1.15	3.5mm (m) to SMA (m) 3.5mm (f) to SMA (f) 3.5mm (m) to SMA (f) 3.5mm (f) to SMA (m)	Polished & Passivated stainless steel	-

4.3-10 to 7/16 DIN Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA47-MM QA47-MF QA47-FM QA47-FF	DC~6	1.2	4.3-10 (m) to 7/16 DIN (m) 4.3-10 (m) to 7/16 DIN (f) 4.3-10 (f) to 7/16 DIN (m) 4.3-10 (f) to 7/16 DIN (f)	Ternary alloy plated brass	-45~+125

7/16 DIN to L27 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QA7L-MF	DC~6	1.2	7/16 DIN (m) to L27 (f)	Ternary alloy plated brass	-55~+165

BNC to MHV Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QABM4-MF QABM4-FM QABM4-FF	DC~0.3	-	BNC (m) to MHV (f) BNC (f) to MHV (m) BNC (f) to MHV (f)	Nickel plated brass	-45~+125

BNC to SHV Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QABS1-MM QABS1-FM QABS1-FF	DC~0.3	-	BNC (m) to SHV (m) BNC (f) to SHV (m) BNC (f) to SHV (f)	Nickel plated brass	-45~+125

BNC to TRB Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QABB1-MM QABB1-FM QABB1-MF QABB1-FF	DC~0.5	-	BNC (m) to TRB (m) BNC (f) to TRB (m) BNC (m) to TRB (f) BNC (f) to TRB (f)	Nickel plated brass	-45~+125

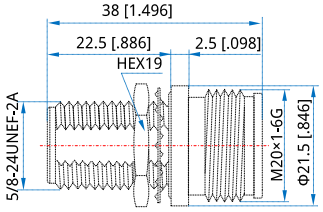
BNC to UHF Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QABZ-MM QABZ-FF QABZ-MF QABZ-FM	DC~3	-	BNC (m) to UHF (m) BNC (f) to UHF (f) BNC (m) to UHF (f) BNC (f) to UHF (m)	Nickel plated brass	-55~+165

N to 4.3-10 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAN4-MM	DC~6	1.2	N (m) to 4.3-10 (m)	Ternary alloy plated brass	-45~+125
QAN4-FF		1.2	N (f) to 4.3-10 (f)		
QAN4-MF		1.2	N (m) to 4.3-10 (f)		
QAN4-FM		1.15	N (f) to 4.3-10 (m)		
QAN4H-FF	DC~6	1.25	N (f) to 4.3-10 (f), bulk head	Ternary alloy plated brass	-45~+125

QAN4H-FF



N to 7.0mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANJ-M QANJ-F	DC ~18	1.25	N (m) to 7.0mm N (f) to 7.0mm	Passivated stainless steel	-55~+165

N to 7/16 DIN Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAN7-MM QAN7-MF QAN7-FM QAN7-FF	DC ~7.5	1.1@3GHz	N (m) to 7/16 DIN (m) N (m) to 7/16 DIN (f) N (f) to 7/16 DIN (m) N (f) to 7/16 DIN (f)	Ternary alloy plated brass	-40~+85

N to BNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANB-MM-B QANB-MF-B QANB-FM-B QANB-FF-B	DC~6	1.35	N (m) to BNC (m) N (m) to BNC (f) N (f) to BNC (m) N (f) to BNC (f)	Nickel plated brass	-55~+155

N to F Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANF-MM QANF-MF QANF-FM QANF-FF	DC~1	1.25	N (m) to F inch thread (m) N (m) to F inch thread (f) N (f) to F inch thread (m) N (f) to F inch thread (f)	Nickel plated brass	-

N to L16 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANL1-MM QANL1-FF QANL1-MF QANL1-FM	DC ~18	1.2	N (m) to L16 (m) N (f) to L16 (f) N (m) to L16 (f) N (f) to L16 (m)	Passivated stainless steel	-55~+165

N to L27 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANL-MF QANL-FF	DC~6	1.2	N (m) to L27 (f) N (f) to L27 (f)	Ternary alloy plated brass	-40~+85

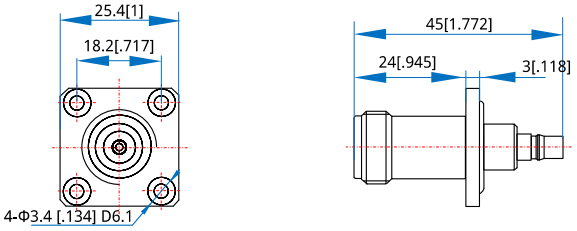
N to NEX10 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANNEX-MF	DC~6	1.1@3GHz	N (m) to NEX10 (f)	Ternary alloy plated brass	-55~+85

N to QMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANQ-MM QANQ-FF QANQ-MF QANQ-FM	DC~6	1.2	N (m) to QMA (m) N (f) to QMA (f) N (m) to QMA (f) N (f) to QMA (m)	Ternary alloy plated brass	-55~+165
QANQL-FF	DC~6	1.2	N (f) to QMA (f), flange mout	Ternary alloy plated brass	-55~+165

QANQL-FF



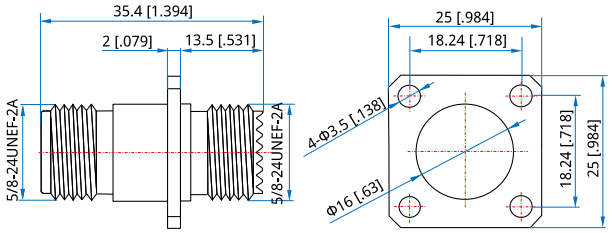
N to SC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANE-MM QANE-FM QANE-MF QANE-FF	DC~8	1.15	N (m) to SC (m) N (f) to SC (m) N (m) to SC (f) N (f) to SC (f)	Passivated stainless steel	-55~+165

N to UHF Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QANZ-MM QANZ-MF QANZ-FM QANZ-FF	DC~1	1.2	N (m) to UHF (SL16) (m) N (m) to UHF (SL16) (f) N (f) to UHF (SL16) (m) N (f) to UHF (SL16) (f)	Nickel plated brass	-45~+125
QANZL-FF	DC~1	-	N (f) to UHF (SL16) (f), flange mout	Nickel plated brass	-45~+125

QANZL-FF



QMA to BNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAQB-FM QAQB-MF	DC~4	1.25	QMA (f) to BNC (m) QMA (m) to BNC (f)	Nickel plated brass	-45~+125

SHV to MHV Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAS1M4-MM QAS1M4-MF QAS1M4-FF	DC~0.3	-	SHV (m) to MHV (m) SHV (m) to MHV (f) SHV (f) to MHV (f)	Nickel plated brass	-45~+125

SMA to 4.3-10 Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAS4-MF QAS4-FM	DC~6	1.15@3GHz	SMA (m) to 4.3-10 (f) SMA (f) to 4.3-10 (m)	Sliver plated phosphor bronze	-

SMA to 7.0mm

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASJ-M QASJ-F	DC ~18	1.25	SMA (m) to 7.0mm SMA (f) to 7.0mm	Passivated stainless steel	-55~+165

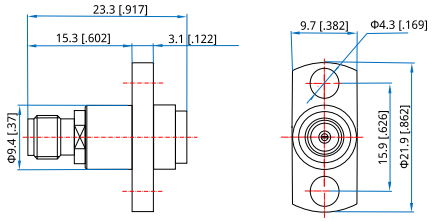
SMA to 7/16 DIN Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAS7-MM QAS7-FF QAS7-MF QAS7-FM	DC ~7.5	1.2	SMA (m) to 7/16 DIN (m) SMA (f) to 7/16 DIN (f) SMA (m) to 7/16 DIN (f) SMA (f) to 7/16 DIN (m)	Gold plated brass	-55~+165

SMA to BMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASI-MM QASI-MF QASI-FM QASI-FF	DC ~18	1.25	SMA (m) to BMA (m) SMA (m) to BMA (f) SMA (f) to BMA (m) SMA (f) to BMA (f)	Passivated stainless steel	-55~+165
QASIL-FF QASIL-FF-1 QASIL-FF-2	DC ~18	1.35	SMA (f) to BMA (f), flange mout	Passivated stainless steel	-55~+165
QASI-MM-B QASI-MF-B QASI-FM-B QASI-FF-B	DC~6	1.15	SMA (m) to BMA (m) SMA (m) to BMA (f) SMA (f) to BMA (m) SMA (f) to BMA (f)	Gold plated brass or Ternary alloy plated brass	-55~+165
QASIH-FF-B	DC~18	1.25	SMA (f) to BMA (f), bulk head	Gold plated brass or Ternary alloy plated brass	-55~+165
QASIL-FM-B	DC ~18	1.15	SMA (f) to BMA (m), flange mout	Gold plated brass or Ternary alloy plated brass	-55~+165
QASIL-FF-B-02	DC~6	1.15	SMA (f) to BMA (f), flange mount, two holes	Gold plated brass or Ternary alloy plated brass	-55~+165

QASIL-FF



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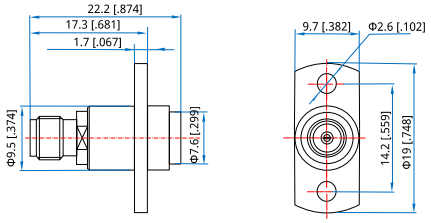

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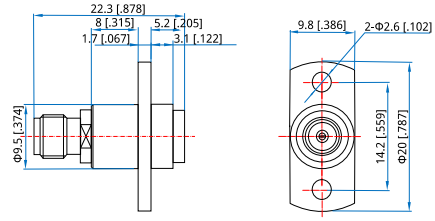

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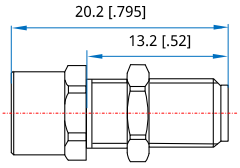

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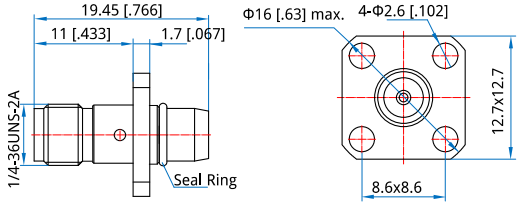

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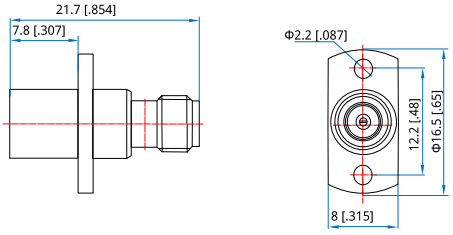
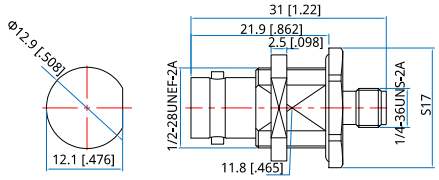


SMA to BNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASB-MM-B QASB-FM-B QASB-MF-B QASB-FF-B	DC~6	1.35	SMA (m) to BNC (m) SMA (f) to BNC (m) SMA (m) to BNC (f) SMA (f) to BNC (f)	Nickel plated brass	-55~+155
QASBH-FF-B QASBH-FF-B-1	DC~3 DC~4	1.25 1.15	SMA (f) to BNC (f), bulk head	Nickel plated brass	-55~+155
QASBL-FF-B	DC~4	1.15	SMA (f) to BNC (f), flange mout	Nickel plated brass	-55~+155

QASBH-FF-B



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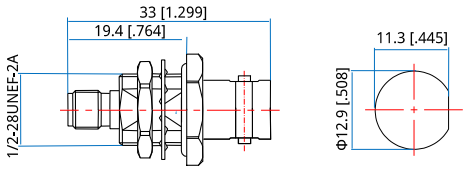
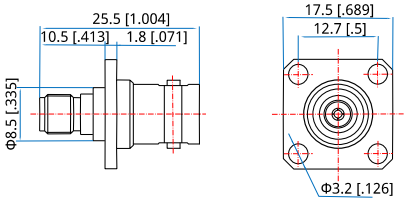


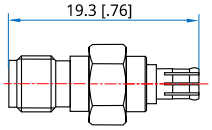
QASBL-FF-B



SMA to MCX Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASM-MM QASM-MF	DC~6	1.2	SMA (m) to MCX (m) SMA (m) to MCX (f)	Gold plated brass	-55~+165
QASM-FM QASM-FM-1	DC~6	1.2	SMA (f) to MCX (m)	Gold plated brass	-55~+165
QASM-FF QASM-FF-1	DC~6	1.2	SMA (f) to MCX (f)	Gold plated brass	-55~+165

QASM-FM



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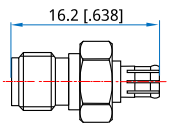
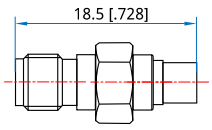


QASM-FF



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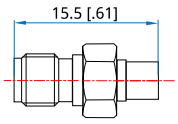


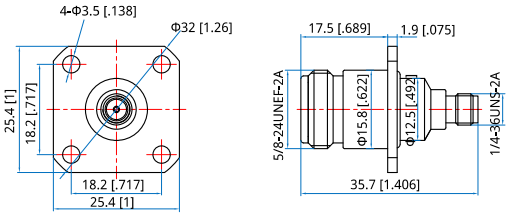
SMA to MMCX Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASX-MM QASX-MF QASX-FM QASX-FF	DC~6	1.2	SMA (m) to MMCX (m) SMA (m) to MMCX (f) SMA (f) to MMCX (m) SMA (f) to MMCX (f)	Gold plated brass	-55~+165

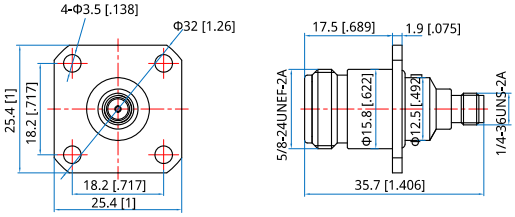
SMA to N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASN-MM QASN-MF QASN-FM QASN-FF	DC ~18	1.15	SMA (m) to N (m) SMA (m) to N (f) SMA (f) to N (m) SMA (f) to N (f)	Passivated stainless steel	-50~+85
QASNL-FF	DC ~18	1.15	SMA (f) to N (f), flange mout	Passivated stainless steel	-50~+85
QASNH-FF-1 QASNH-FF-2	DC ~18	1.15	SMA (f) to N (f), bulk head	Passivated stainless steel	-50~+85
QASN-MM-B QASN-MF-B QASN-FM-B QASN-FF-B	DC ~18	1.2	SMA (m) to N (m) SMA (m) to N (f) SMA (f) to N (m) SMA (f) to N (f)	Nickel plated brass	-50~+85
QASNL-FF-B	DC ~18	1.2	SMA (f) to N (f), flange mout	Nickel plated brass	-50~+85
QASN-MM-B6 QASN-MF-B6 QASN-FM-B6 QASN-FF-B6	DC~6	1.15	SMA (m) to N (m) SMA (m) to N (f) SMA (f) to N (m) SMA (f) to N (f)	Ternary alloy plated brass	-55~+165
QASNL-FF-B6	DC~6	1.15	SMA (f) to N (f), flange mout	Ternary alloy plated brass	-55~+165
QASNH-FF-B6 QASNH-FF-B6-1 QASNH-FF-B6-2	DC~6	1.15	SMA (f) to N (f), bulk head	Ternary alloy plated brass	-55~+165

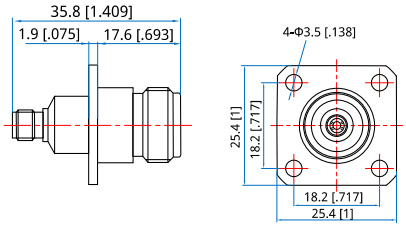
QASNL-FF



QASNL-FF-B



QASNL-FF-B6



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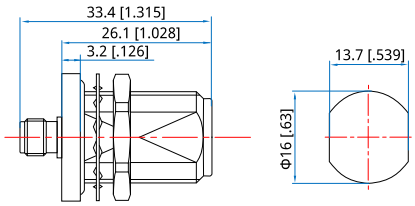
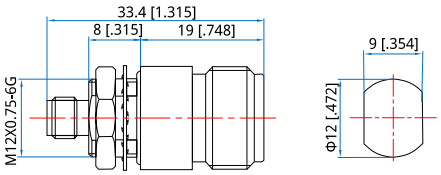
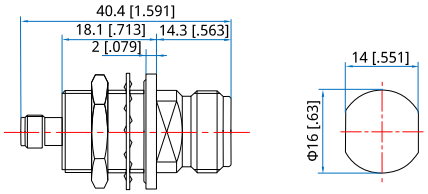


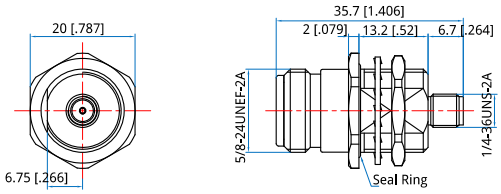
QASNH-FF-B6-1



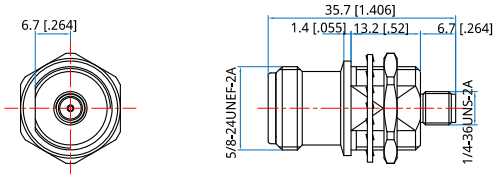
QASNH-FF-B6-2



QASNH-FF-1



QASNH-FF-2



SMA to QMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASQ-MM-B QASQ-MF-B QASQ-FM-B QASQ-FF-B	DC~6	1.25	SMA (m) to QMA (m) SMA (m) to QMA (f) SMA (f) to QMA (m) SMA (f) to QMA (f)	Gold plated brass	-

SMA to SMC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAS6-MM QAS6-FF QAS6-MF QAS6-FM	DC~10	1.25	SMA (m) to SMC (m) SMA (f) to SMC (f) SMA (m) to SMC (f) SMA (f) to SMC (m)	Passivated stainless steel	-55~+165

SMA to SMB Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASD-MM QASD-MF QASD-FM QASD-FF	DC~4	1.2	SMA (m) to SMB (m) SMA (m) to SMB (f) SMA (f) to SMB (m) SMA (f) to SMB (f)	Gold plated brass	-55~+165

SMA to SSMB Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASU-MF QASU-FM QASU-FF	DC~6	1.2	SMA (m) to SSMB (f) SMA (f) to SSMB (m) SMA (f) to SSMB (f)	Gold plated brass	-55~+165

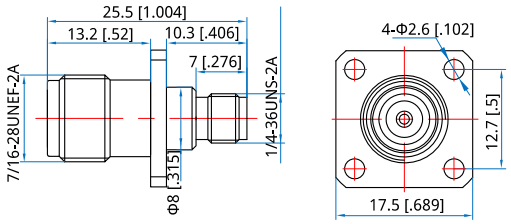
SMA to SSMC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASW-MM QASW-FF QASW-MF QASW-FM	DC~17	1.25	SMA (m) to SSMC (m) SMA (f) to SSMC (f) SMA (m) to SSMC (f) SMA (f) to SSMC (m)	Gold plated brass	-45~+125

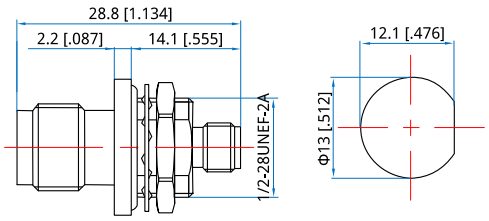
SMA to TNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAST-MM QAST-MF QAST-FM QAST-FF	DC ~18	1.2	SMA (m) to TNC (m) SMA (m) to TNC (f) SMA (f) to TNC (m) SMA (f) to TNC (f)	Passivated stainless steel	-50~+85
QASTL-FF	DC ~18	1.25	SMA (f) to TNC (f), flange mout	Passivated stainless steel	-50~+85
QASTH-FF	DC ~18	1.3	SMA (f) to TNC (f), bulk head	Passivated stainless steel	-55~+165

QASTL-FF



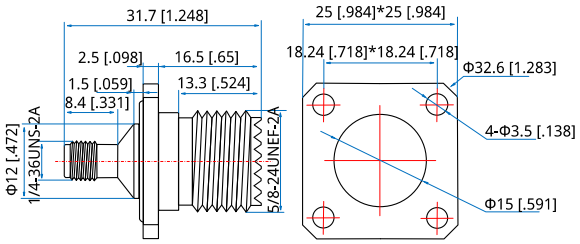
QASTH-FF



SMA to UHF Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASZ-MM QASZ-FM QASZ-MF QASZ-FF	DC~1	1.25	SMA (m) to UHF (SL16) (m) SMA (f) to UHF (SL16) (m) SMA (m) to UHF (SL16) (f) SMA (f) to UHF (SL16) (f)	Gold plated brass (SMA) Nickel plated brass (UHF)	-45~+125
QASZL-FF	DC~1	-	SMA (f) to UHF (SL16) (f), flange mout	Ternary alloy plated brass	-45~+125

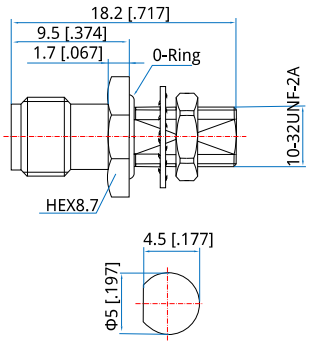
QASZL-FF



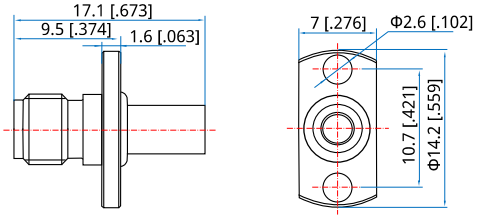
SMP to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAPS-MM QAPS-FM QAPS-MF QAPS-FF	DC~26.5	1.3	SMP (m) to SMA (m) SMP (f) to SMA (m) SMP (m) to SMA (f) SMP (f) to SMA (f)	Passivated stainless steel & Gold plated beryllium copper& Gold plated brass	-55~+85
QAPSR-FM	DC~6	1.2	SMP (f) to SMA (m), right angle	Passivated stainless steel & Gold plated beryllium copper& Gold plated brass	-55~+165
QAPSH-MF	DC ~18	1.3	SMP (m) to SMA (f), bulk head	Passivated stainless steel & Gold plated beryllium copper& Gold plated brass	-55~+85
QAPSL-MF QAPSL-MF-B	DC ~18	1.3	SMP (m) to SMA (f), flange mout	Passivated stainless steel & Gold plated beryllium copper& Gold plated brass	-55~+165
QAPSL-FF QAPSL-FF-1	DC~6	1.2	SMP (f) to SMA (f), flange mout	Passivated stainless steel & Gold plated beryllium copper& Gold plated brass	-55~+165

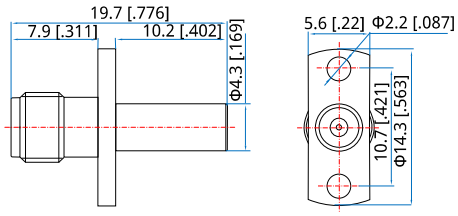
QAPSH-MF



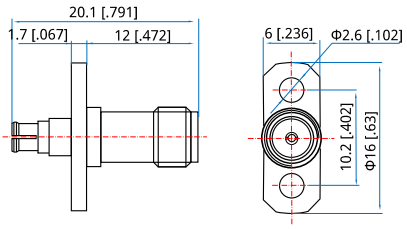
QAPSL-MF



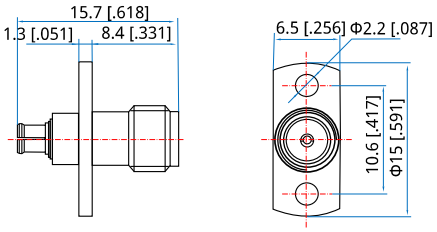
QAPSL-MF-B



QAPSL-FF



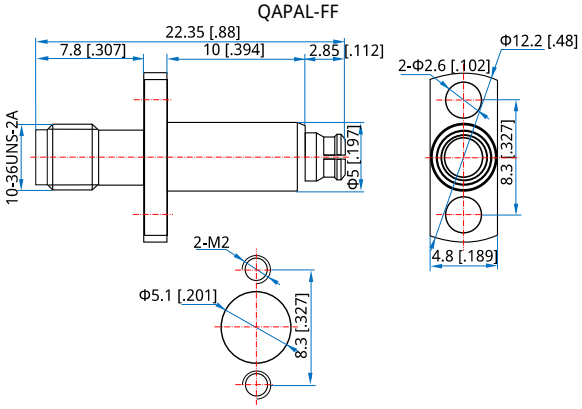
QAPSL-FF-1



SMP to SSMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAPAL-FF	DC ~18	1.25	SMP (f) to SSMA (f), flange mout	Gold plated brass	-50~+85

QAPAL-FF



SSMA to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAAS-MM	DC~26.5	1.3	SSMA (m) to SMA (m)	Passivated stainless steel	-55~+85
QAAS-MF			SSMA (m) to SMA (f)		
QAAS-FM			SSMA (f) to SMA (m)		
QAAS-FF			SSMA (f) to SMA (f)		

SSMP to 2.4mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAG2-MM QAG2-FF QAG2-MF QAG2-FM	DC~50	1.35	SSMP (m) to 2.4mm (m) SSMP (f) to 2.4mm (f) SSMP (m) to 2.4mm (f) SSMP (f) to 2.4mm (m)	Passivated stainless steel & Gold plated beryllium copper	-55~+165

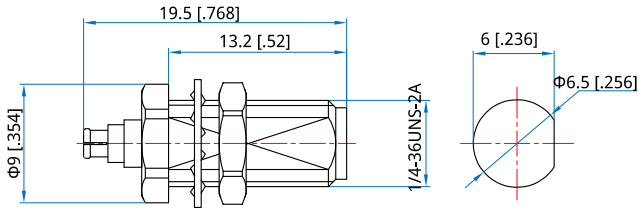
SSMP to 2.92mm Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAGK-MM QAGK-MF QAGK-FM QAGK-FF	DC~40	1.2	SSMP (m) to 2.92mm (m) SSMP (m) to 2.92mm (f) SSMP (f) to 2.92mm (m) SSMP (f) to 2.92mm (f)	Passivated stainless steel	-60~+165

SSMP to SMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAGS-FF	DC ~18	1.25	SSMP (f) to SMA (f)	Passivated stainless steel or Gold plated brass	-55~+125
QAGSH-FF	DC ~18	1.3	SSMP (f) to SMA (f), bulk head	Passivated stainless steel or Gold plated brass	-55~+125

QAGSH-FF



TNC to 7/16 DIN Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAT7-FM	DC ~7.5	1.2	TNC (f) to 7/16 DIN (m)	Ternary alloy plated brass	-55~+165

TNC to BNC Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QATB-MM QATB-FM QATB-MF QATB-FF	DC~4	1.2	TNC (m) to BNC (m) TNC (f) to BNC (m) TNC (m) to BNC (f) TNC (f) to BNC (f)	Nickel plated brass	-45~+125
QATBR-FM QATBR-MF	DC~4	-	TNC (f) to BNC (m), right angle TNC (m) to BNC (f), right angle	Nickel plated brass	-45~+125

TNC to N Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QATN-MM QATN-MF QATN-FM QATN-FF	DC ~18	1.2	TNC (m) to N (m) TNC (m) to N (f) TNC (f) to N (m) TNC (f) to N (f)	Passivated stainless steel	-55~+165

TNC to QMA Series

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QATQ-MF QATQ-FM	DC~6	1.35	TNC (m) to QMA (f) TNC (f) to QMA (m)	Nickel plated brass	-45~+125

Quick Adapters

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QASQS-MM QASQS-FM	DC~26.5	1.3	SMA (m) to Quick SMA (m) SMA (f) to Quick SMA (m)	Passivated stainless steel or Gold plated brass	-

NMD Adapters

Part Number	Frequency (GHz)	VSWR (max.)	Description	Outer Conductor	Temperature (°C)
QAMVMV-FF QAMVMV-FM	DC~67	1.35	NMD 1.85mm (f) to NMD 1.85mm (f) NMD 1.85mm (f) to NMD 1.85mm (m)	Passivated stainless steel	-55~+165
QAMVM2-FM	DC~50	1.25	NMD 1.85mm (f) to NMD 2.4mm (m)	Passivated stainless steel	-55~+165
QAMVMK-FM	DC~40	1.2	NMD 1.85mm (f) to NMD 2.92mm (m)	Passivated stainless steel	-55~+165
QAMVV-FM QAMVV-FF	DC~67	1.3	NMD 1.85mm (f) to 1.85mm (m) NMD 1.85mm (f) to 1.85mm (f)	Passivated stainless steel	-55~+165
QAMV2-FM QAMV2-FF	DC~50	1.25	NMD 1.85mm (f) to 2.4mm (m) NMD 1.85mm (f) to 2.4mm (f)	Passivated stainless steel	-55~+165
QAMVK-FM QAMVK-FF	DC~40	1.2	NMD 1.85mm (f) to 2.92mm (m) NMD 1.85mm (f) to 2.92mm (f)	Passivated stainless steel	-55~+165
QAMV3-FM QAMV3-FF	DC~33	1.2	NMD 1.85mm (f) to 3.5mm (m) NMD 1.85mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+165
QAM2M2-FF QAM2M2-FM	DC~50	1.25	NMD 2.4mm (f) to NMD 2.4mm (f) NMD 2.4mm (f) to NMD 2.4mm (m)	Passivated stainless steel	-55~+165
QAM2MK-FM QAM2MK-FF	DC~40	1.2	NMD 2.4mm (f) to NMD 2.92mm (m) NMD 2.4mm (f) to NMD 2.92mm (f)	Passivated stainless steel	-55~+165
QAM2M3-FF QAM2M3-FM	DC~26.5	1.15	NMD 2.4mm (f) toNMD 3.5mm (f) NMD 2.4mm (f) toNMD 3.5mm (m)	Passivated stainless steel	-55~+165
QAM22-MM QAM22-MF QAM22-FM QAM22-FF	DC~50	1.25	NMD 2.4mm (m) to 2.4mm (m) NMD 2.4mm (m) to 2.4mm (f) NMD 2.4mm (f) to 2.4mm (m) NMD 2.4mm (f) to 2.4mm (f)	Passivated stainless steel	-55~+165
QAM2K-FM QAM2K-FF	DC~40	1.2	NMD 2.4mm (f) to 2.92mm (m) NMD 2.4mm (f) to 2.92mm (f)	Passivated stainless steel	-55~+165
QAM23-FM QAM23-FF	DC~33	1.2	NMD 2.4mm (f) to 3.5mm (m) NMD 2.4mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+165
QAMKMK-FF QAMKMK-FM	DC~40	1.2	NMD 2.92mm (f) to NMD 2.92mm (f) NMD 2.92mm (f) to NMD 2.92mm (m)	Passivated stainless steel	-55~+165
QAMKM3-FF QAMKM3-FM	DC~26.5	1.15	NMD 2.92mm (f) to NMD 3.5mm (f) NMD 2.92mm (f) to NMD 3.5mm (m)	Passivated stainless steel	-55~+165
QAMKK-MM QAMKK-MF QAMKK-FM QAMKK-FF	DC~40	1.2	NMD 2.92mm (m) to 2.92mm (m) NMD 2.92mm (m) to 2.92mm (f) NMD 2.92mm (f) to 2.92mm (m) NMD 2.92mm (f) to 2.92mm (f)	Passivated stainless steel	-55~+165
QAMK3-FM QAMK3-FF	DC~33	1.2	NMD 2.92mm (f) to 3.5mm (m) NMD 2.92mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+165
QAM3M3-FF QAM3M3-FM	DC~26.5	1.15	NMD 3.5mm (f) to NMD 3.5mm (f) NMD 3.5mm (f) to NMD 3.5mm (m)	Passivated stainless steel	-55~+165
QAM33-MM QAM33-MF QAM33-FM QAM33-FF	DC~33	1.2	NMD 3.5mm (m) to 3.5mm (m) NMD 3.5mm (m) to 3.5mm (f) NMD 3.5mm (f) to 3.5mm (m) NMD 3.5mm (f) to 3.5mm (f)	Passivated stainless steel	-55~+165

Connectors

Connectors are used to transmit currents or signals.

Qualwave supplies many types of connectors, including end launch connectors, vertical launch connectors ,PCB connectors, cable connectors, multi-channel connectors and launch accessories etc.

End Launch Connectors

Qualwave can provide different connectors for end launch connectors, including 1.85mm, 2.4mm, 2.92mm, SMA etc.

Features:

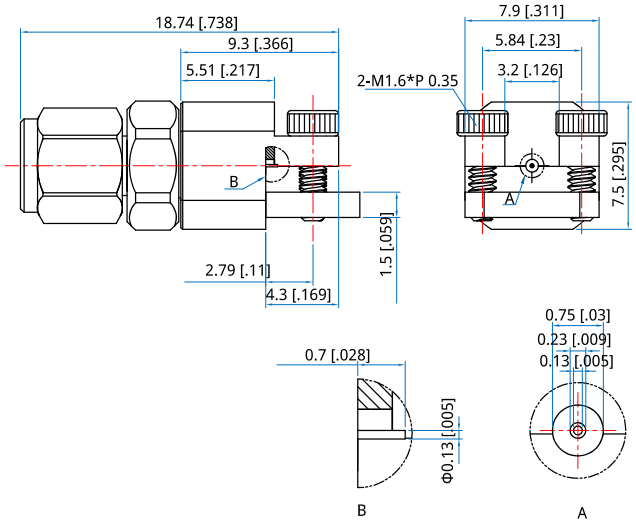
- Low VSWR
- No Welding
- Reusable
- Easy installation

Applications:

- Laboratory Test

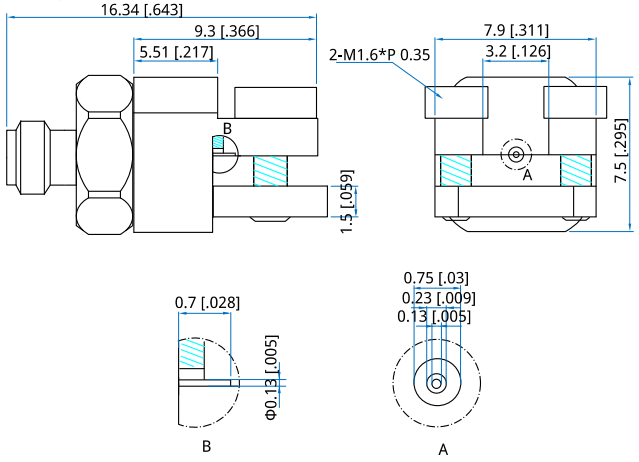
1.0mm Series

1.0mm (DC~110GHz, Male: VSWR≤1.6, Female: VSWR≤2, Stainless steel & Nickel plated brass)



QELC-1-1

1.0mm (m), Φ0.13mm

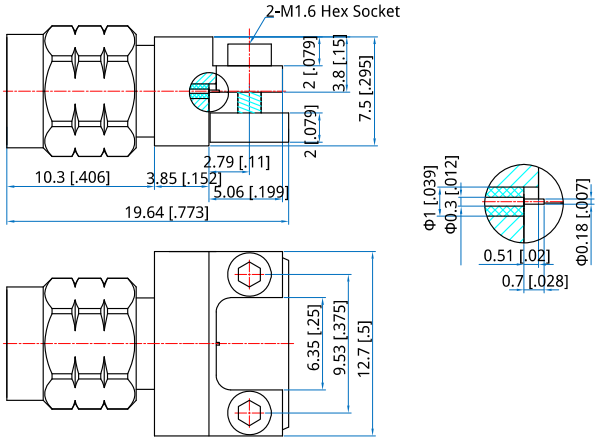


QELC-1F-1

1.0mm (f), Φ0.13mm

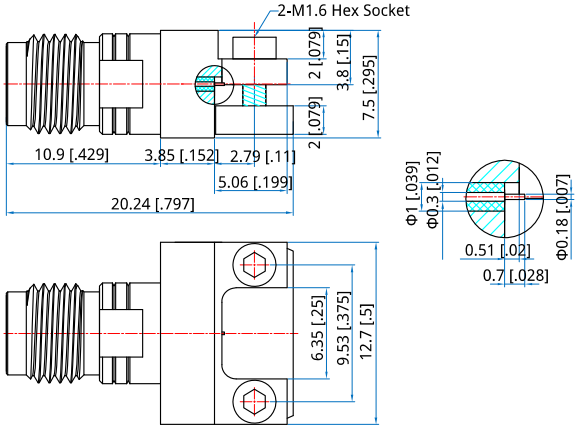
1.85mm Series

1.85mm (DC~67GHz, VSWR≤1.35, Passivated stainless steel)



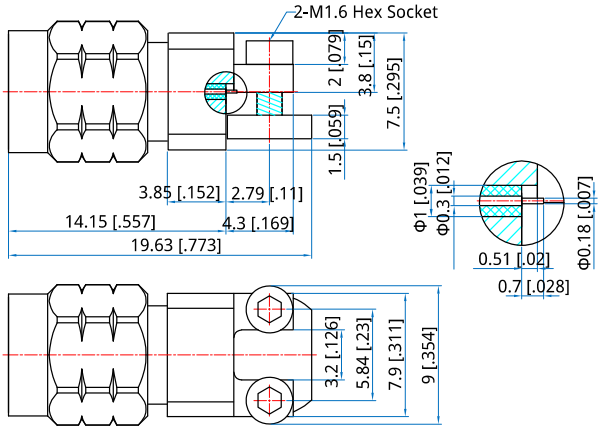
QELC-V-2

1.85mm (m), Φ0.18mm, Standard Version



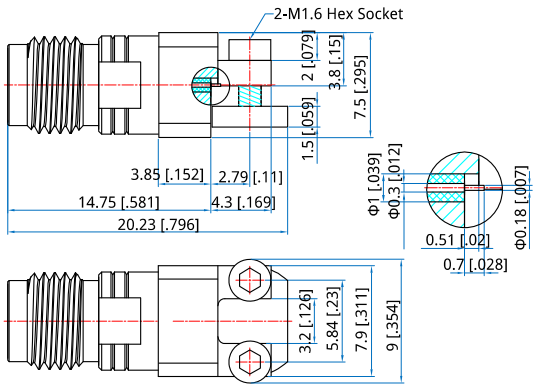
QELC-VF-2

1.85mm (f), Φ0.18mm, Standard Version



QELC-V-3

1.85mm (m), Φ0.18mm, Small Size Version

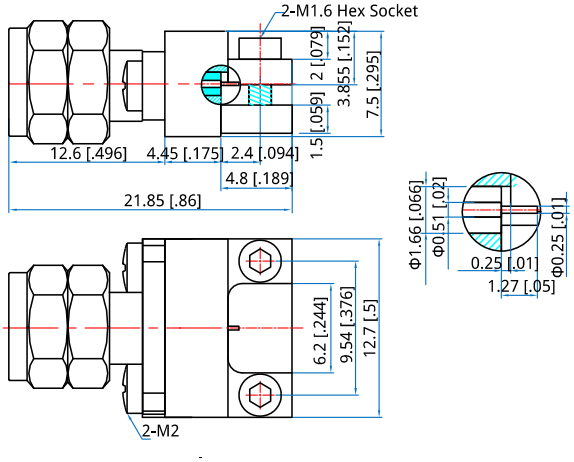


QELC-VF-3

1.85mm (f), Φ0.18mm, Small Size Version

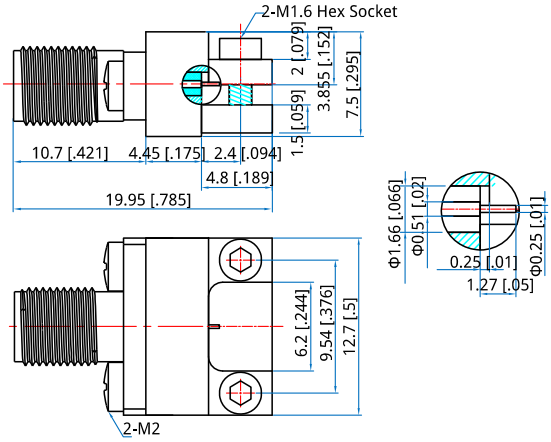
2.4mm Series

2.4mm (DC~50GHz, VSWR≤1.3, Passivated stainless steel)



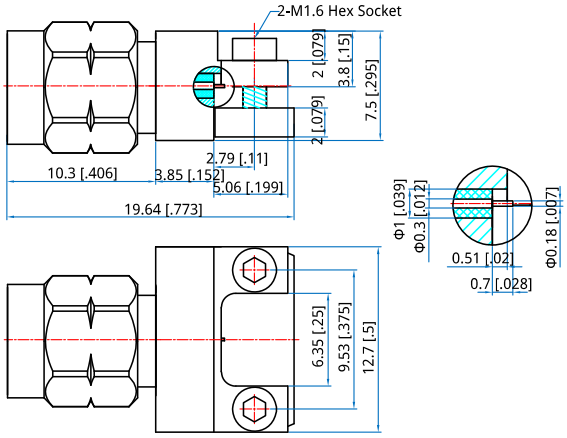
QELC-2-1

2.4mm (m), Φ0.25mm, Standard Version



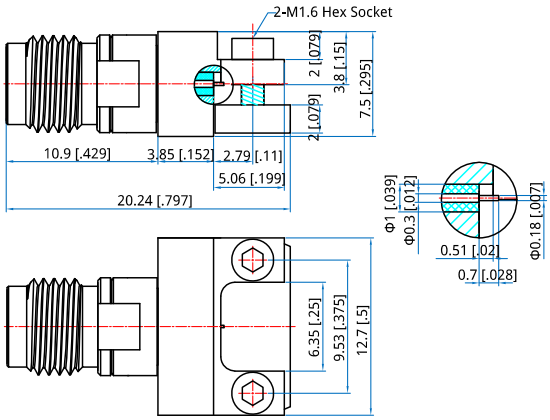
QELC-2F-1

2.4mm (f), Φ0.25mm, Standard Version



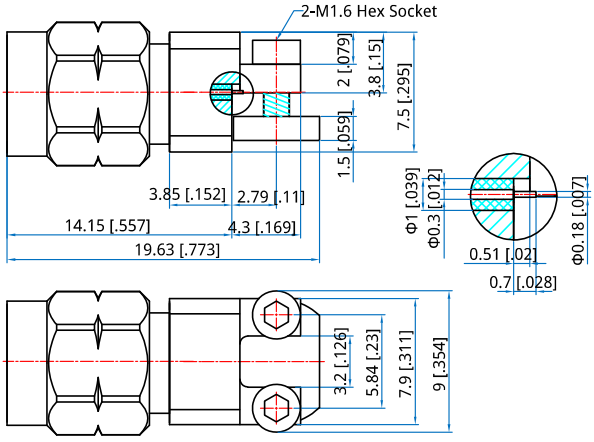
QELC-2-2

2.4mm (m), Φ0.18mm, Standard Version



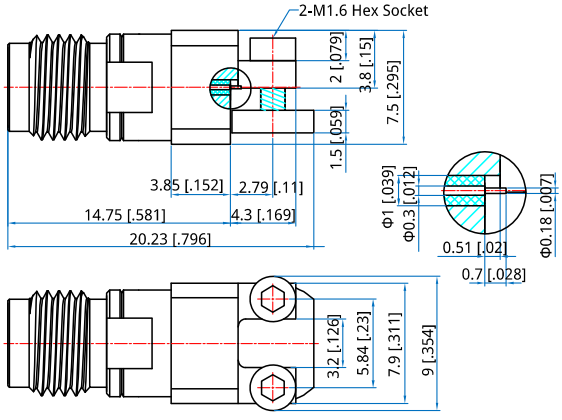
QELC-2F-2

2.4mm (f), Φ0.18mm, Standard Version



QELC-2-3

2.4mm (m), Φ0.18mm, Small Size Version

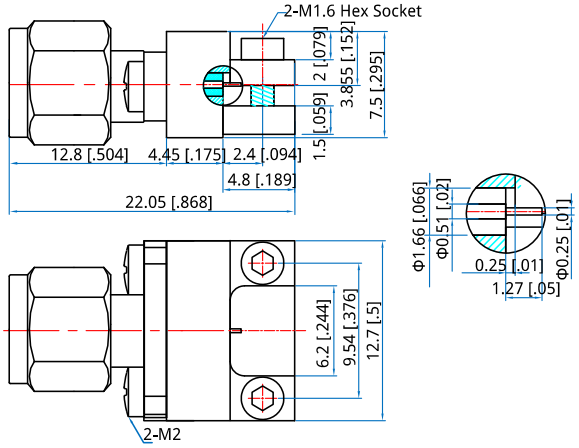


QELC-2F-3

2.4mm (f), Φ0.18mm, Small Size Version

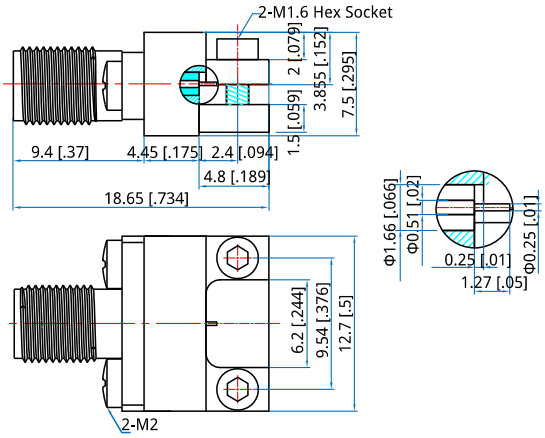
2.92mm Series

2.92mm (DC~40GHz, VSWR≤1.25, Passivated stainless steel)



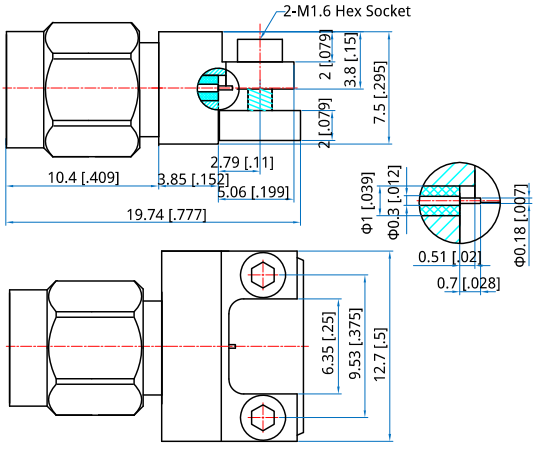
QELC-K-1

2.92mm (m), Φ0.25mm, Standard Version



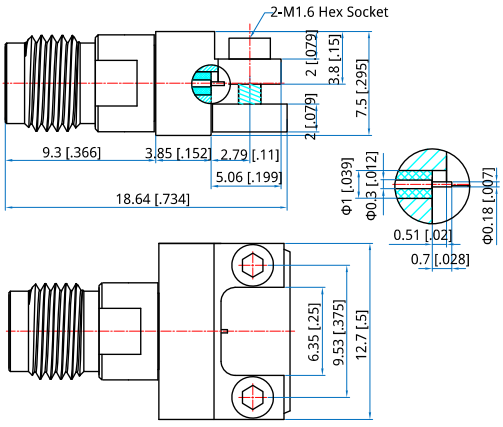
QELC-KF-1

2.92mm (f), Φ0.25mm, Standard Version



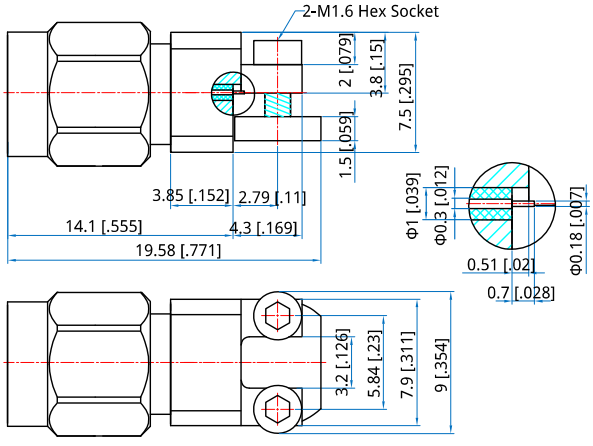
QELC-K-2

2.92mm (m), Φ0.18mm, Standard Version



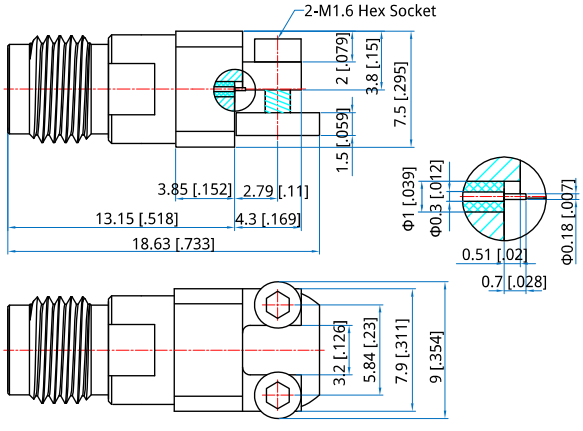
QELC-KF-2

2.92mm (f), Φ0.18mm, Standard Version



QELC-K-3

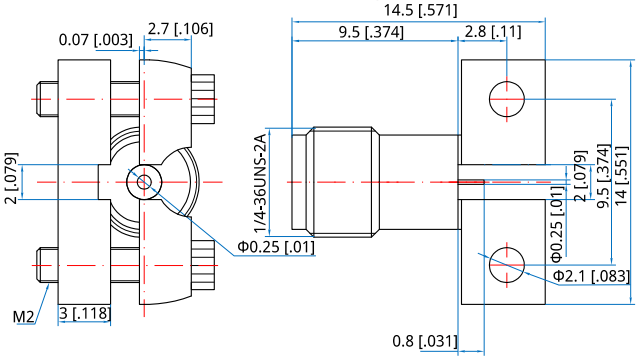
2.92mm (m), Φ0.18mm, Small Size Version

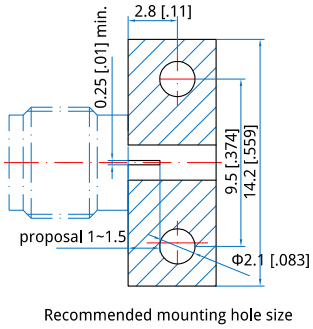


QELC-KF-3

2.92mm (f), Φ0.18mm, Small Size Version

2.92mm (DC~40GHz, VSWR≤1.35, Gold plated brass)





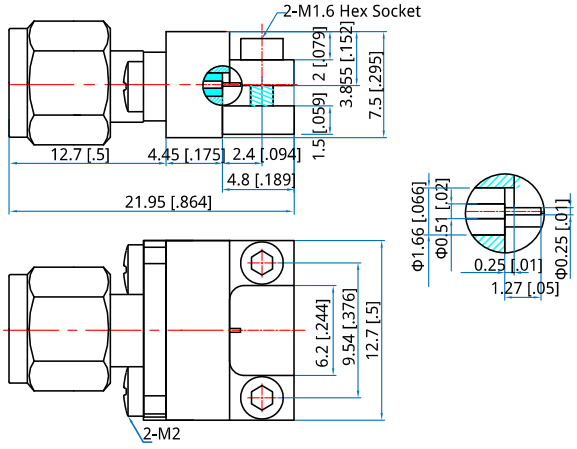
Recommended mounting hole size

QELC-KF-5

2.92mm (f), Φ0.25mm

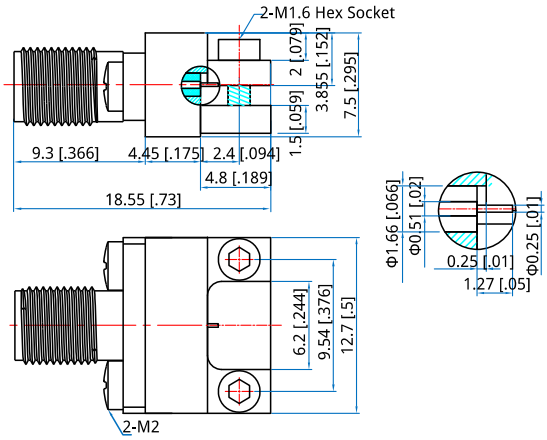
SMA Series

SMA (DC~26.5GHz, VSWR≤1.25, Passivated stainless steel)



QELC-S-1

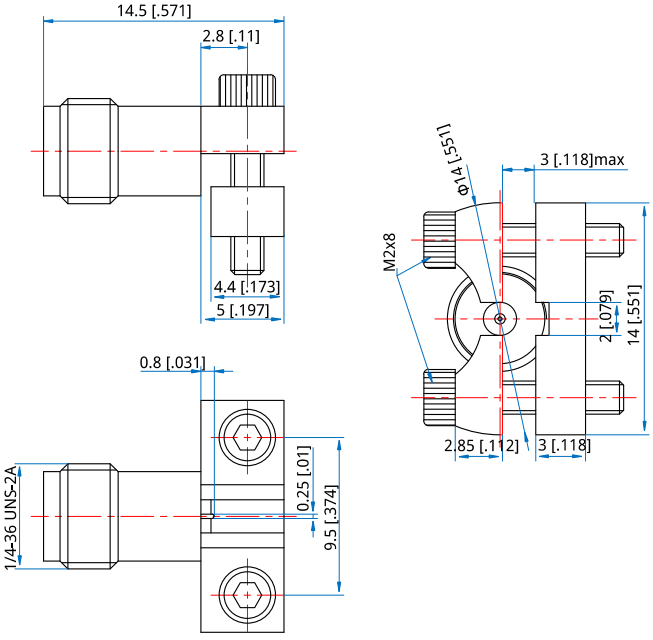
SMA (m), Φ0.25mm



QELC-SF-1

SMA (f), Φ0.25mm

SMA (DC~18GHz, VSWR≤1.5, Brass)



QELC-SF-6

SMA (f), Φ0.25mm

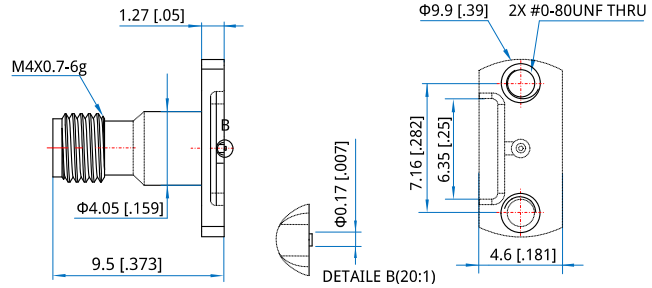
Vertical Launch Connectors

Qualwave can provide different connectors for vertical launch connectors, including 1.85mm, 2.4mm, 2.92mm , SMA etc.

Features: Low VSWR, No Welding, Reusable, Easy Installation; **Applications:** Laboratory Test.

1.0mm Series

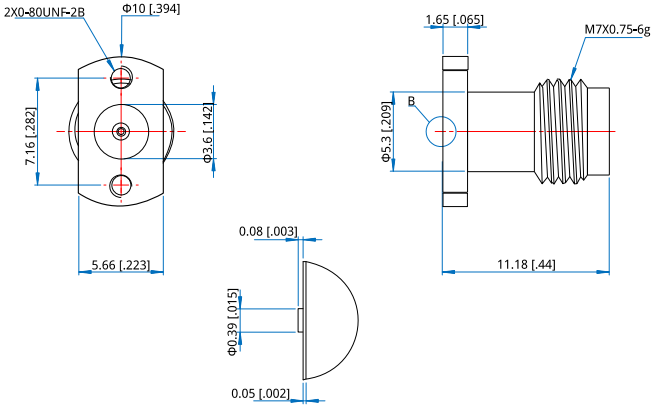
1.0mm Female (DC~110GHz, VSWR≤1.5, Passivated stainless steel)



QVLC-1F-1

1.85mm Series

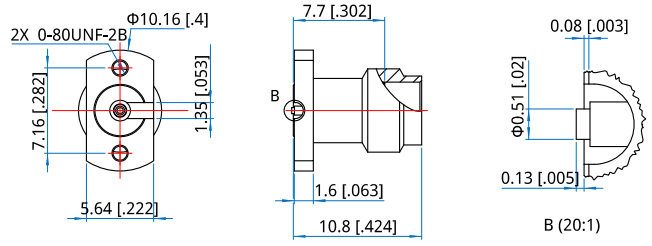
1.85mm Female (DC~65GHz, VSWR≤1.4, Passivated stainless steel)



QVLC-VF-1

2.4mm Series

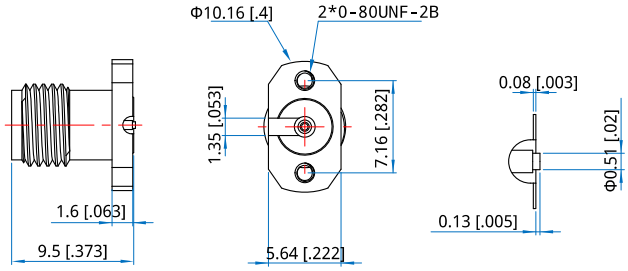
2.4mm Female (DC~50GHz, VSWR≤1.2, Passivated stainless steel)



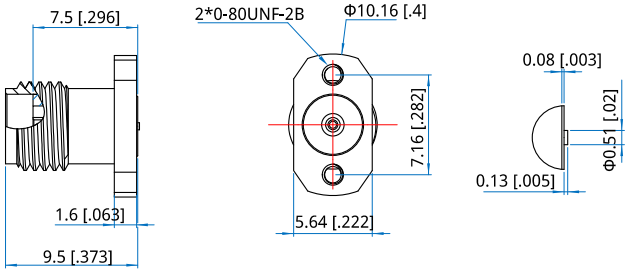
QVLC-2F-1

2.92mm Series

2.92mm Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)



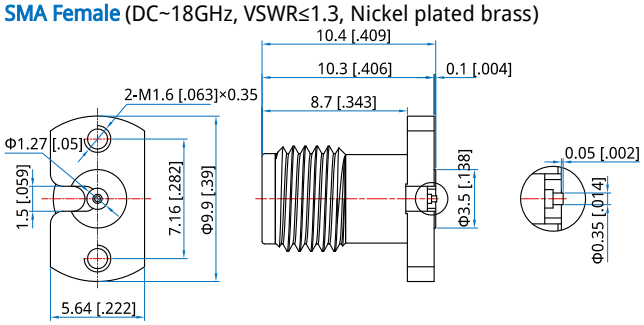
QVLC-KF-1



QVLC-KF-2

SMA Series

SMA Female (DC~18GHz, VSWR≤1.3, Nickel plated brass)



QVLC-SF-1

Field Replaceable Connectors

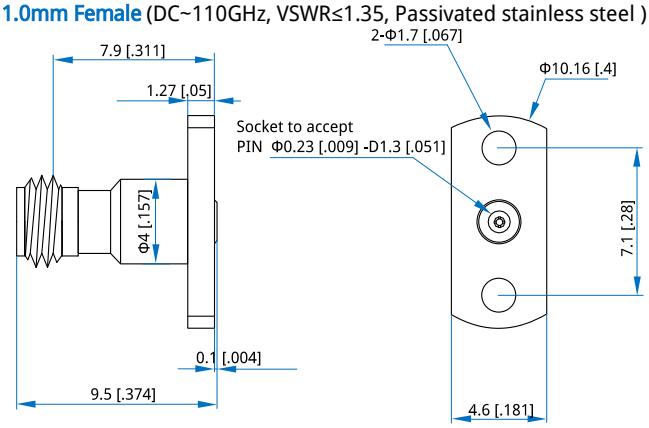
Qualwave provides various field replaceable connectors, including 1.0mm, 1.85mm, 2.4mm, 2.92mm, SSMA, SMA, N, TNC etc to meet different requirements. The frequency range covers DC~110GHz.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

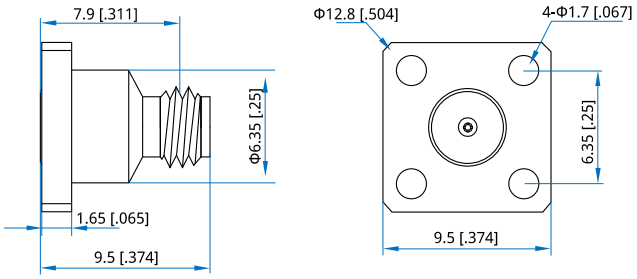
Flange Mount

1.0mm Series

1.0mm Female (DC~110GHz, VSWR≤1.35, Passivated stainless steel)



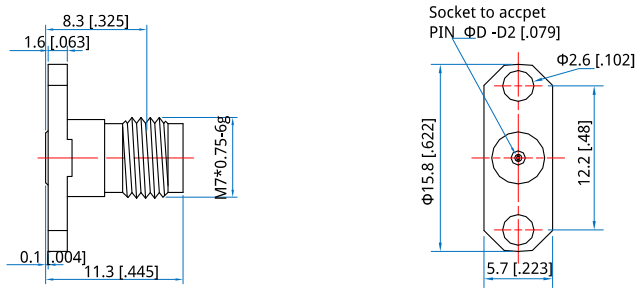
Part Number
QC1-FL2G-S23-01



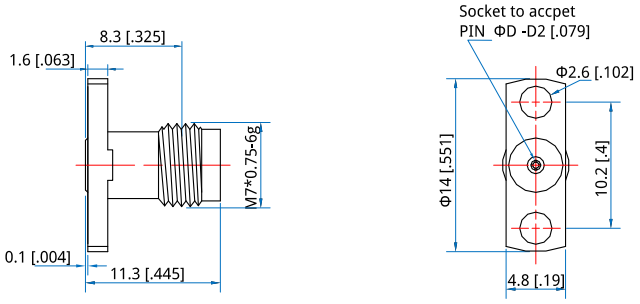
Part Number
QC1-FL4G-S23-01

1.85mm Series

1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

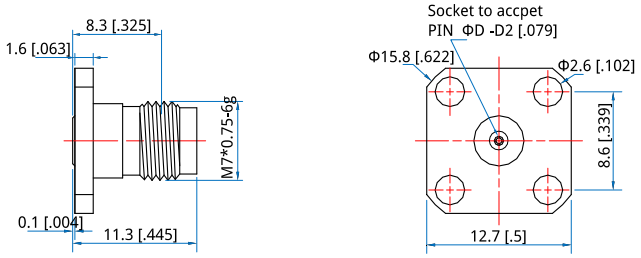


Part Number	ΦD
QCV-FL2G-S23-01	0.23 [.009]
QCV-FL2G-S30-01	0.3 [.012]

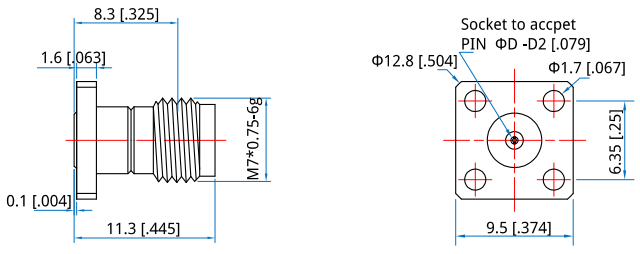


Part Number	ΦD
QCV-FL2G-S23-02	0.23 [.009]
QCV-FL2G-S30-02	0.3 [.012]

1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

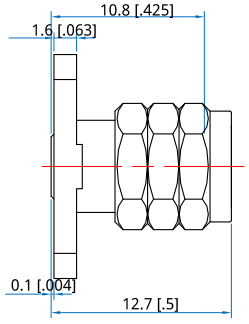


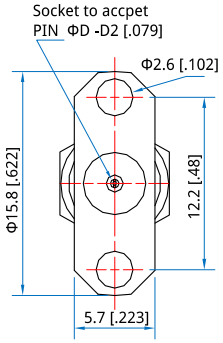
Part Number	ΦD
QCV-FL4G-S23-01	0.23 [.009]
QCV-FL4G-S30-01	0.3 [.012]



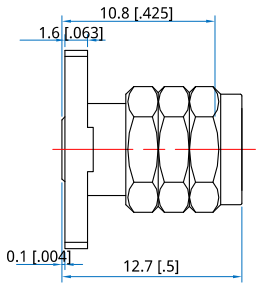
Part Number	ΦD
QCV-FL4G-S23-02	0.23 [.009]
QCV-FL4G-S30-02	0.3 [.012]

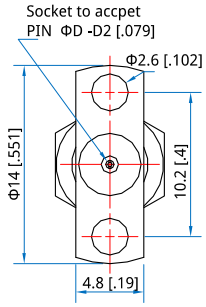
1.85mm Male (DC~67GHz, VSWR≤1.25, Passivated stainless steel)





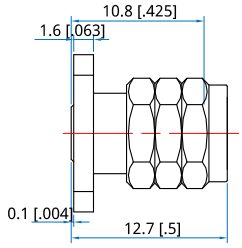
Part Number	ΦD
QCV-ML2G-S23-01	0.23 [.009]
QCV-ML2G-S30-01	0.3 [.012]

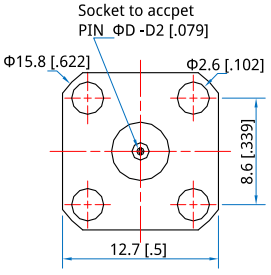




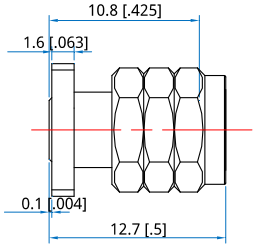
Part Number	ΦD
QCV-ML2G-S23-02	0.23 [.009]
QCV-ML2G-S30-02	0.3 [.012]

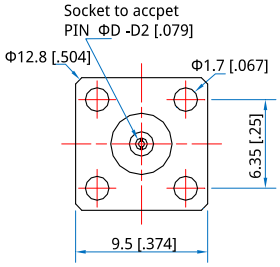
1.85mm Male (DC~67GHz, VSWR≤1.25, Passivated stainless steel)





Part Number	ΦD
QCV-ML4G-S23-01	0.23 [.009]
QCV-ML4G-S30-01	0.3 [.012]

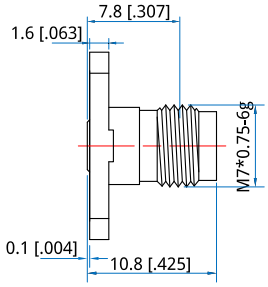


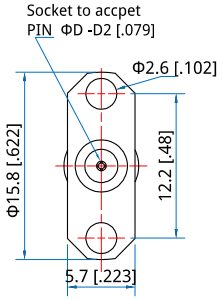


Part Number	ΦD
QCV-ML4G-S23-02	0.23 [.009]
QCV-ML4G-S30-02	0.3 [.012]

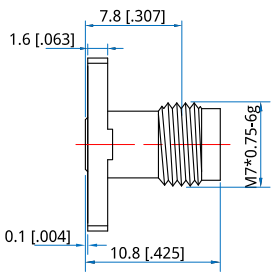
2.4mm Series

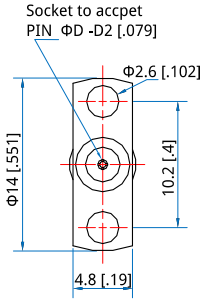
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





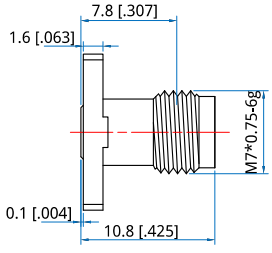
Part Number	ΦD
QC2-FL2G-S23-01	0.23 [.009]
QC2-FL2G-S30-01	0.3 [.012]
QC2-FL2G-S38-01	0.38 [.015]
QC2-FL2G-S51-01	0.51 [.02]

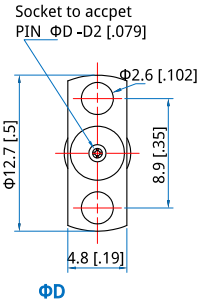




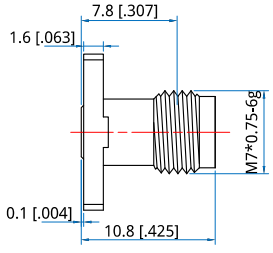
Part Number	ΦD
QC2-FL2G-S23-02	0.23 [.009]
QC2-FL2G-S30-02	0.3 [.012]
QC2-FL2G-S38-02	0.38 [.015]
QC2-FL2G-S51-02	0.51 [.02]

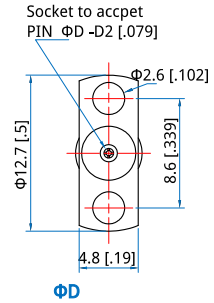
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





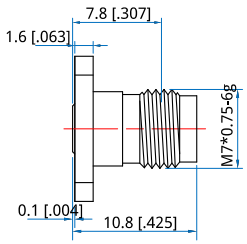
Part Number	ΦD
QC2-FL2G-S23-03	0.23 [.009]
QC2-FL2G-S30-03	0.3 [.012]
QC2-FL2G-S38-03	0.38 [.015]
QC2-FL2G-S51-03	0.51 [.02]

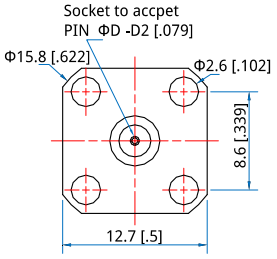




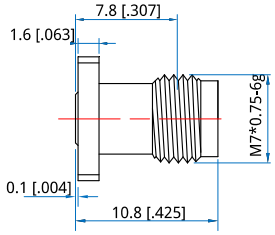
Part Number	ΦD
QC2-FL2G-S23-04	0.23 [.009]
QC2-FL2G-S30-04	0.3 [.012]
QC2-FL2G-S38-04	0.38 [.015]
QC2-FL2G-S51-04	0.51 [.02]

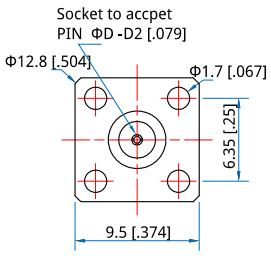
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





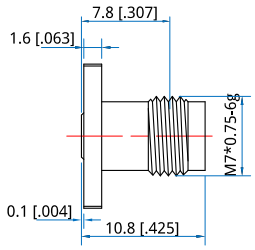
Part Number	ΦD
QC2-FL4G-S23-01	0.23 [.009]
QC2-FL4G-S30-01	0.3 [.012]
QC2-FL4G-S38-01	0.38 [.015]
QC2-FL4G-S51-01	0.51 [.02]

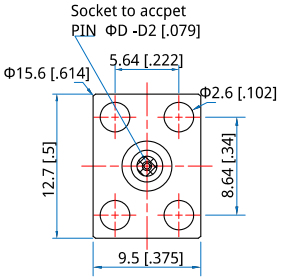




Part Number	ΦD
QC2-FL4G-S23-02	0.23 [.009]
QC2-FL4G-S30-02	0.3 [.012]
QC2-FL4G-S38-02	0.38 [.015]
QC2-FL4G-S51-02	0.51 [.02]

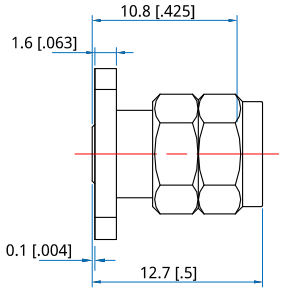
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

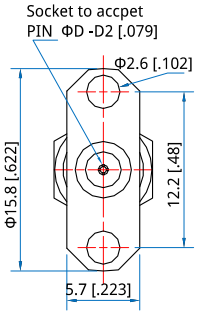




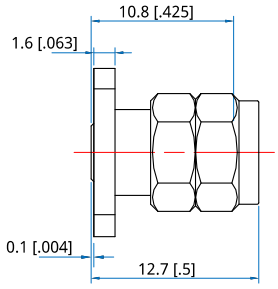
Part Number	ΦD
QC2-FL4G-S23-03	0.23 [.009]
QC2-FL4G-S30-03	0.3 [.012]
QC2-FL4G-S38-03	0.38 [.015]
QC2-FL4G-S51-03	0.51 [.02]

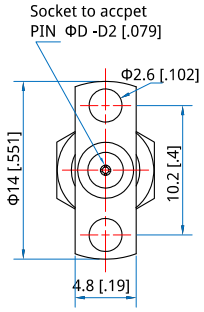
2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





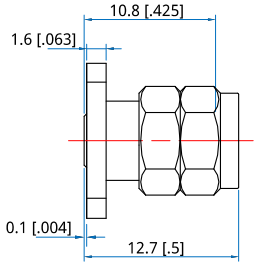
Part Number	ΦD
QC2-ML2G-S23-01	0.23 [.009]
QC2-ML2G-S30-01	0.3 [.012]
QC2-ML2G-S51-01	0.51 [.02]

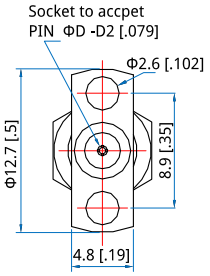




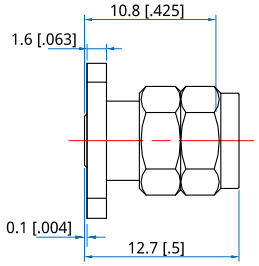
Part Number	ΦD
QC2-ML2G-S23-02	0.23 [.009]
QC2-ML2G-S30-02	0.3 [.012]
QC2-ML2G-S51-02	0.51 [.02]

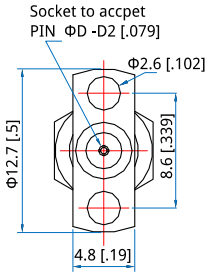
2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





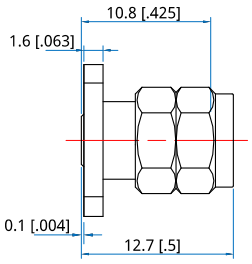
Part Number	ΦD
QC2-ML2G-S23-03	0.23 [.009]
QC2-ML2G-S30-03	0.3 [.012]
QC2-ML2G-S51-03	0.51 [.02]

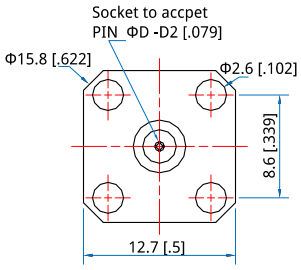




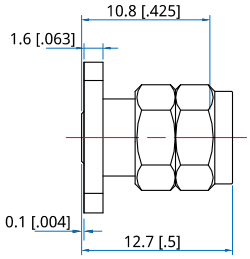
Part Number	ΦD
QC2-ML2G-S51-04	0.51 [.02]

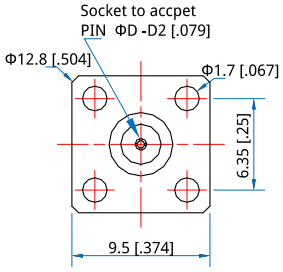
2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





Part Number	ΦD
QC2-ML4G-S23-01	0.23 [.009]
QC2-ML4G-S30-01	0.3 [.012]
QC2-ML4G-S51-01	0.51 [.02]

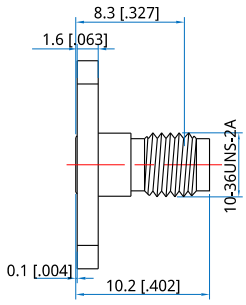


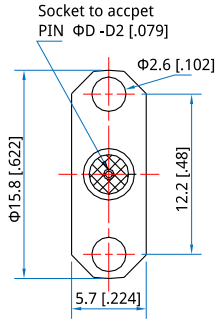


Part Number	ΦD
QC2-ML4G-S23-02	0.23 [.009]
QC2-ML4G-S30-02	0.3 [.012]
QC2-ML4G-S51-02	0.51 [.02]

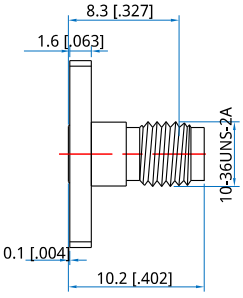
SSMA Series

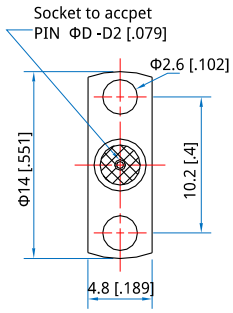
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)





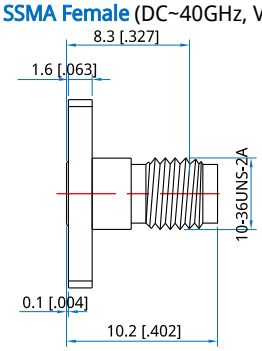
Part Number	ΦD
QCA-FL2G-S23-01	0.23 [.009]
QCA-FL2G-S30-01	0.3 [.012]
QCA-FL2G-S38-01	0.38 [.015]
QCA-FL2G-S46-01	0.46 [.018]
QCA-FL2G-S51-01	0.51 [.02]

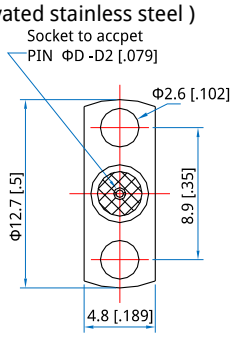




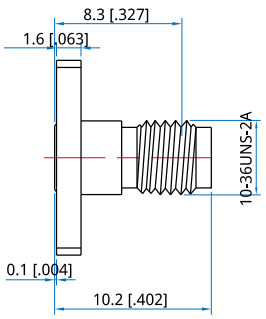
Part Number	ΦD
QCA-FL2G-S23-02	0.23 [.009]
QCA-FL2G-S30-02	0.3 [.012]
QCA-FL2G-S38-02	0.38 [.015]
QCA-FL2G-S46-02	0.46 [.018]
QCA-FL2G-S51-02	0.51 [.02]

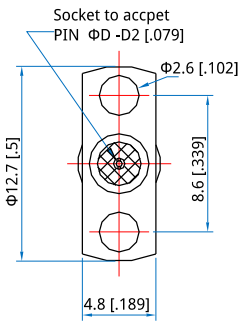
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)





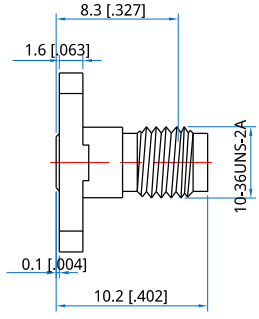
Part Number	ΦD
QCA-FL2G-S23-03	0.23 [.009]
QCA-FL2G-S30-03	0.3 [.012]
QCA-FL2G-S38-03	0.38 [.015]
QCA-FL2G-S46-03	0.46 [.018]
QCA-FL2G-S51-03	0.51 [.02]

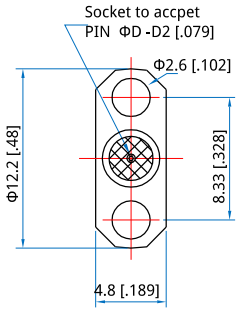




Part Number	ΦD
QCA-FL2G-S23-04	0.23 [.009]
QCA-FL2G-S30-04	0.3 [.012]
QCA-FL2G-S38-04	0.38 [.015]
QCA-FL2G-S46-04	0.46 [.018]
QCA-FL2G-S51-04	0.51 [.02]

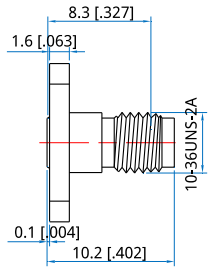
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)

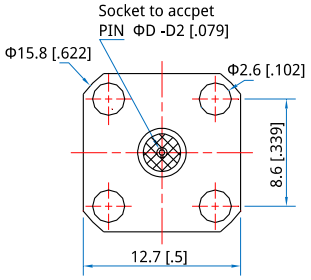




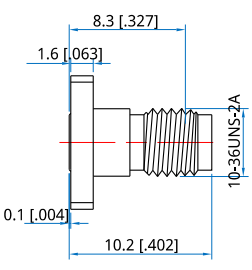
Part Number	ΦD
QCA-FL2G-S23-05	0.23 [.009]
QCA-FL2G-S30-05	0.3 [.012]
QCA-FL2G-S38-05	0.38 [.015]
QCA-FL2G-S46-05	0.46 [.018]
QCA-FL2G-S51-05	0.51 [.02]

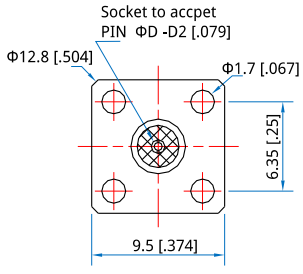
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)





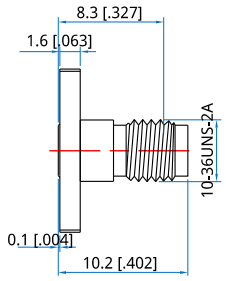
Part Number	ΦD
QCA-FL4G-S23-01	0.23 [.009]
QCA-FL4G-S30-01	0.3 [.012]
QCA-FL4G-S38-01	0.38 [.015]
QCA-FL4G-S46-01	0.46 [.018]
QCA-FL4G-S51-01	0.51 [.02]

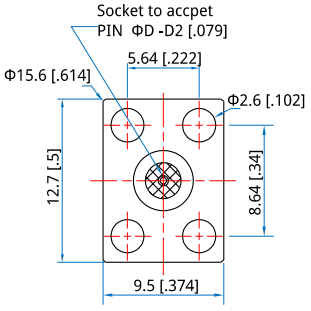




Part Number	ΦD
QCA-FL4G-S23-02	0.23 [.009]
QCA-FL4G-S30-02	0.3 [.012]
QCA-FL4G-S38-02	0.38 [.015]
QCA-FL4G-S46-02	0.46 [.018]
QCA-FL4G-S51-02	0.51 [.02]

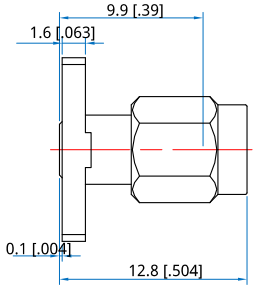
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)

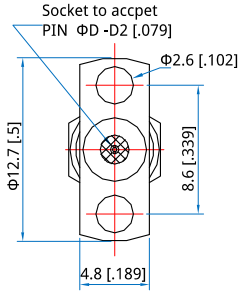




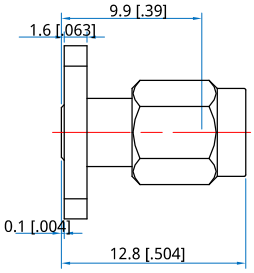
Part Number	ΦD
QCA-FL4G-S23-03	0.23 [.009]
QCA-FL4G-S30-03	0.3 [.012]
QCA-FL4G-S38-03	0.38 [.015]
QCA-FL4G-S46-03	0.46 [.018]
QCA-FL4G-S51-03	0.51 [.02]

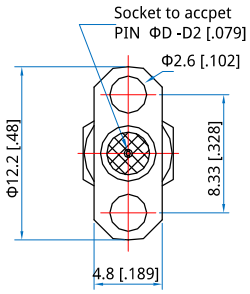
SSMA Male (DC~40GHz, VSWR≤1.2, Passivated stainless steel)





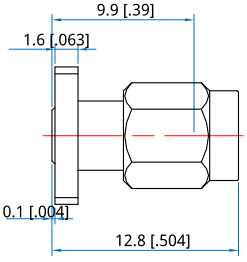
Part Number	ΦD
QCA-ML2G-S23-01	0.23 [.009]
QCA-ML2G-S30-01	0.3 [.012]
QCA-ML2G-S38-01	0.38 [.015]
QCA-ML2G-S46-01	0.46 [.018]
QCA-ML2G-S51-01	0.51 [.02]

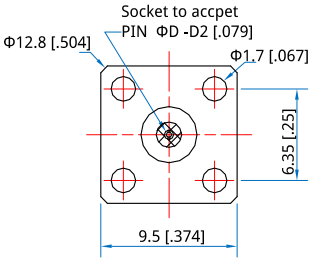




Part Number	ΦD
QCA-ML2G-S23-02	0.23 [.009]
QCA-ML2G-S30-02	0.3 [.012]
QCA-ML2G-S38-02	0.38 [.015]
QCA-ML2G-S46-02	0.46 [.018]
QCA-ML2G-S51-02	0.51 [.02]

SSMA Male (DC~40GHz, VSWR≤1.2, Passivated stainless steel)

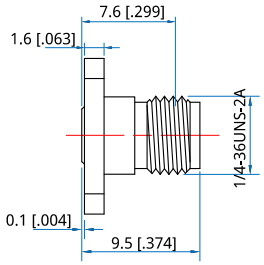


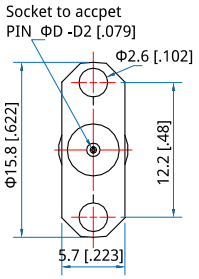


Part Number	ΦD
QCA-ML4G-S23-01	0.23 [.009]
QCA-ML4G-S30-01	0.3 [.012]
QCA-ML4G-S38-01	0.38 [.015]
QCA-ML4G-S46-01	0.46 [.018]
QCA-ML4G-S51-01	0.51 [.02]

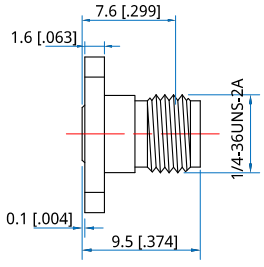
2.92mm Series

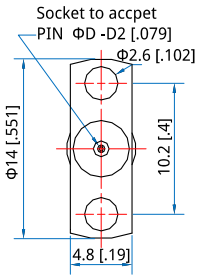
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





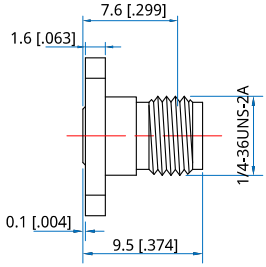
Part Number	ΦD
QCK-FL2G-S23-01	0.23 [.009]
QCK-FL2G-S30-01	0.3 [.012]
QCK-FL2G-S38-01	0.38 [.015]
QCK-FL2G-S46-01	0.46 [.018]
QCK-FL2G-S51-01	0.51 [.02]

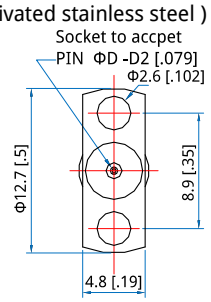




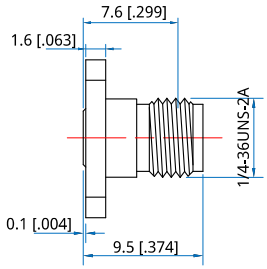
Part Number	ΦD
QCK-FL2G-S23-02	0.23 [.009]
QCK-FL2G-S30-02	0.3 [.012]
QCK-FL2G-S38-02	0.38 [.015]
QCK-FL2G-S46-02	0.46 [.018]
QCK-FL2G-S51-02	0.51 [.02]

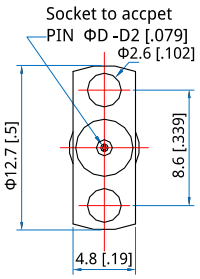
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





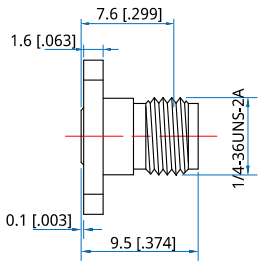
Part Number	ΦD
QCK-FL2G-S23-03	0.23 [.009]
QCK-FL2G-S30-03	0.3 [.012]
QCK-FL2G-S38-03	0.38 [.015]
QCK-FL2G-S46-03	0.46 [.018]
QCK-FL2G-S51-03	0.51 [.02]

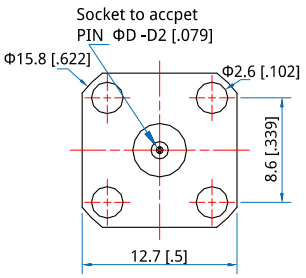




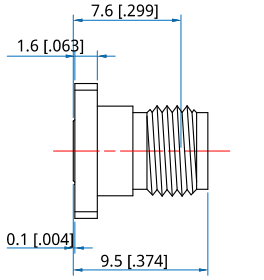
Part Number	ΦD
QCK-FL2G-S23-04	0.23 [.009]
QCK-FL2G-S30-04	0.3 [.012]
QCK-FL2G-S38-04	0.38 [.015]
QCK-FL2G-S46-04	0.46 [.018]
QCK-FL2G-S51-04	0.51 [.02]

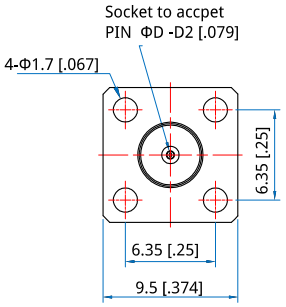
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





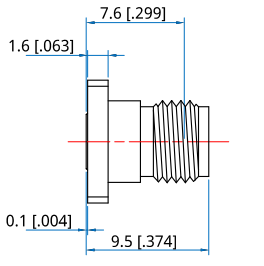
Part Number	ΦD
QCK-FL4G-S23-01	0.23 [.009]
QCK-FL4G-S30-01	0.3 [.012]
QCK-FL4G-S38-01	0.38 [.015]
QCK-FL4G-S46-01	0.46 [.018]
QCK-FL4G-S51-01	0.51 [.02]

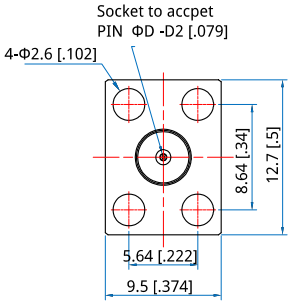




Part Number	ΦD
QCK-FL4G-S23-02	0.23 [.009]
QCK-FL4G-S30-02	0.3 [.012]
QCK-FL4G-S38-02	0.38 [.015]
QCK-FL4G-S46-02	0.46 [.018]
QCK-FL4G-S51-02	0.51 [.02]

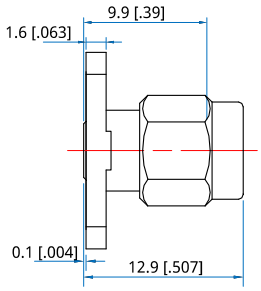
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

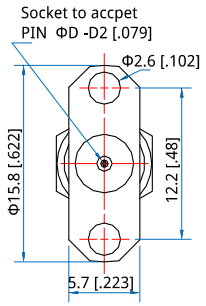




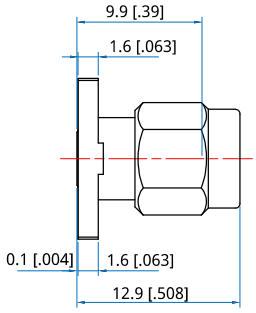
Part Number	ΦD
QCK-FL4G-S23-03	0.23 [.009]
QCK-FL4G-S30-03	0.3 [.012]
QCK-FL4G-S38-03	0.38 [.015]
QCK-FL4G-S46-03	0.46 [.018]
QCK-FL4G-S51-03	0.51 [.02]

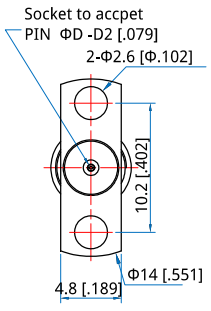
2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





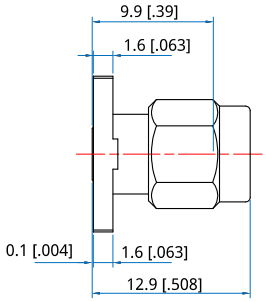
Part Number	ΦD
QCK-ML2G-S23-01	0.23 [.009]
QCK-ML2G-S30-01	0.3 [.012]
QCK-ML2G-S38-01	0.38 [.015]
QCK-ML2G-S46-01	0.46 [.018]
QCK-ML2G-S51-01	0.51 [.02]

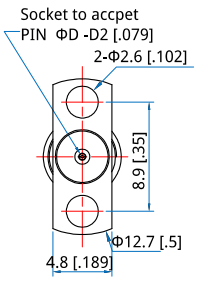




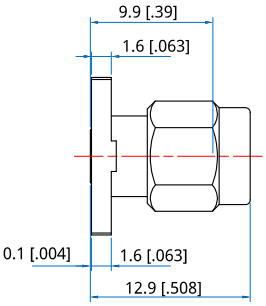
Part Number	ΦD
QCK-ML2G-S23-02	0.23 [.009]
QCK-ML2G-S30-02	0.3 [.012]
QCK-ML2G-S38-02	0.38 [.015]
QCK-ML2G-S46-02	0.46 [.018]
QCK-ML2G-S51-02	0.51 [.02]

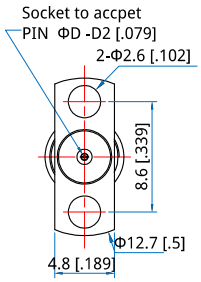
2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





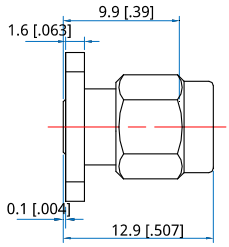
Part Number	ΦD
QCK-ML2G-S23-03	0.23 [.009]
QCK-ML2G-S30-03	0.3 [.012]
QCK-ML2G-S38-03	0.38 [.015]
QCK-ML2G-S46-03	0.46 [.018]
QCK-ML2G-S51-03	0.51 [.02]

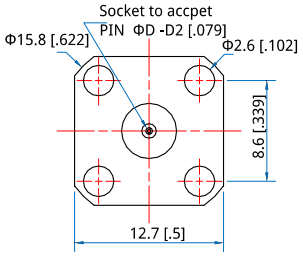




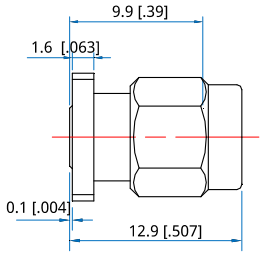
Part Number	ΦD
QCK-ML2G-S51-04	0.51 [.02]

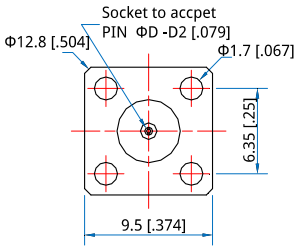
2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





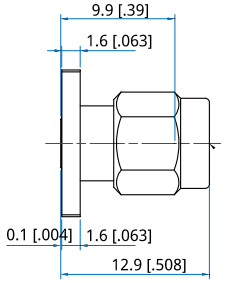
Part Number	ΦD
QCK-ML4G-S23-01	0.23 [.009]
QCK-ML4G-S30-01	0.3 [.012]
QCK-ML4G-S38-01	0.38 [.015]
QCK-ML4G-S46-01	0.46 [.018]
QCK-ML4G-S51-01	0.51 [.02]

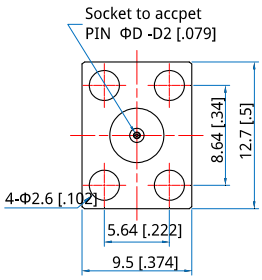




Part Number	ΦD
QCK-ML4G-S23-02	0.23 [.009]
QCK-ML4G-S30-02	0.3 [.012]
QCK-ML4G-S38-02	0.38 [.015]
QCK-ML4G-S46-02	0.46 [.018]
QCK-ML4G-S51-02	0.51 [.02]

2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

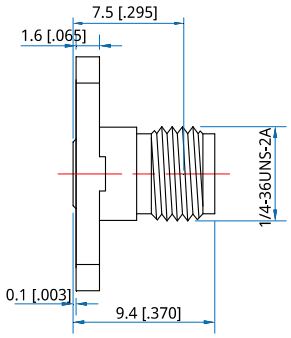


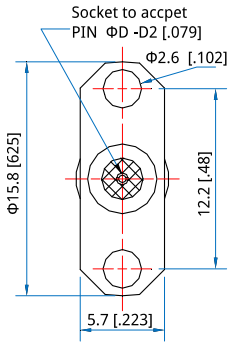


Part Number	ΦD
QCK-ML4G-S23-03	0.23 [.009]
QCK-ML4G-S30-03	0.3 [.012]
QCK-ML4G-S38-03	0.38 [.015]
QCK-ML4G-S46-03	0.46 [.018]
QCK-ML4G-S51-03	0.51 [.02]

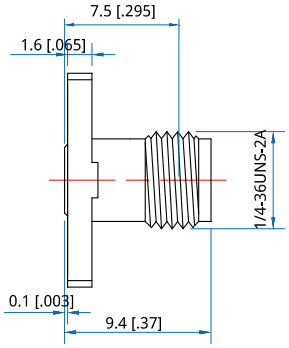
SMA Series

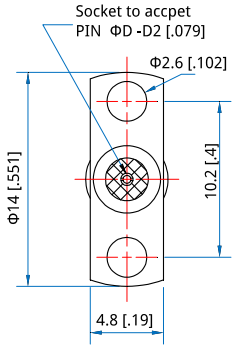
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





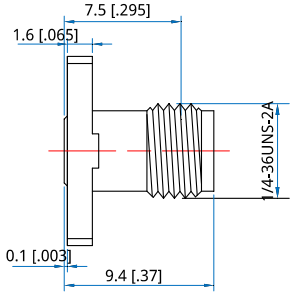
Part Number	ΦD
QCS-FL2G-S23-01	0.23 [.009]
QCS-FL2G-S30-01	0.3 [.012]
QCS-FL2G-S38-01	0.38 [.015]
QCS-FL2G-S46-01	0.46 [.018]
QCS-FL2G-S51-01	0.51 [.02]
QCS-FL2G-S91-01	0.91 [.036]

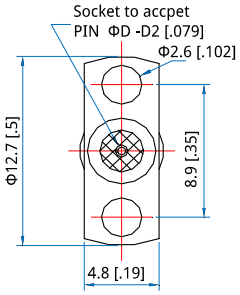




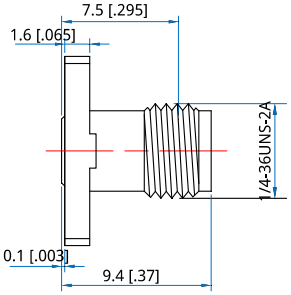
Part Number	ΦD
QCS-FL2G-S23-02	0.23 [.009]
QCS-FL2G-S30-02	0.3 [.012]
QCS-FL2G-S38-02	0.38 [.015]
QCS-FL2G-S46-02	0.46 [.018]
QCS-FL2G-S51-02	0.51 [.02]
QCS-FL2G-S91-02	0.91 [.036]

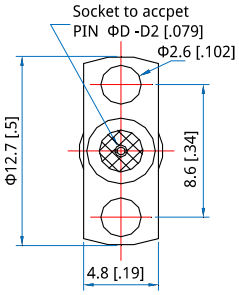
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





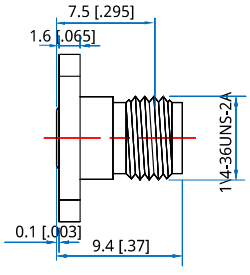
Part Number	ΦD
QCS-FL2G-S23-03	0.23 [.009]
QCS-FL2G-S30-03	0.3 [.012]
QCS-FL2G-S38-03	0.38 [.015]
QCS-FL2G-S46-03	0.46 [.018]
QCS-FL2G-S51-03	0.51 [.02]
QCS-FL2G-S91-03	0.91 [.036]

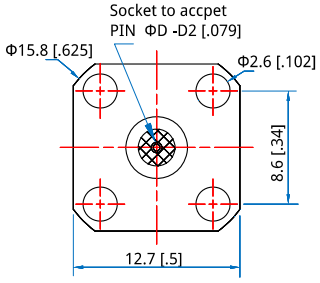




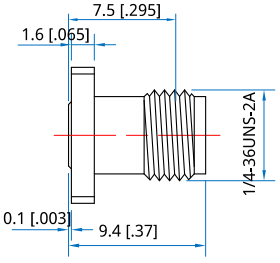
Part Number	ΦD
QCS-FL2G-S23-04	0.23 [.009]
QCS-FL2G-S30-04	0.3 [.012]
QCS-FL2G-S38-04	0.38 [.015]
QCS-FL2G-S46-04	0.46 [.018]
QCS-FL2G-S51-04	0.51 [.02]
QCS-FL2G-S91-04	0.91 [.036]

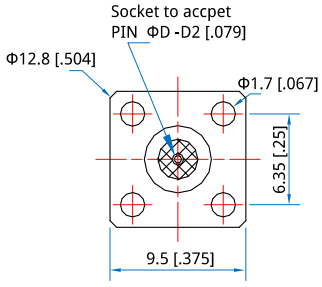
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





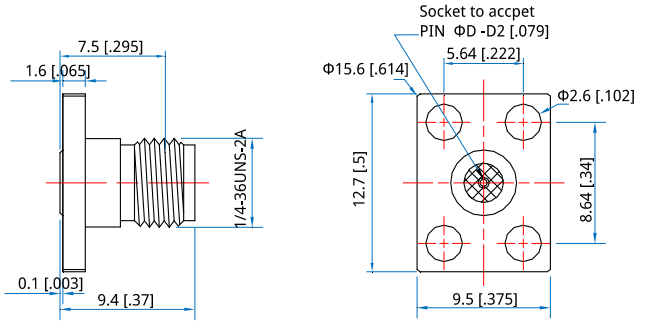
Part Number	ΦD
QCS-FL4G-S23-01	0.23 [.009]
QCS-FL4G-S30-01	0.3 [.012]
QCS-FL4G-S38-01	0.38 [.015]
QCS-FL4G-S46-01	0.46 [.018]
QCS-FL4G-S51-01	0.51 [.02]
QCS-FL4G-S91-01	0.91 [.036]



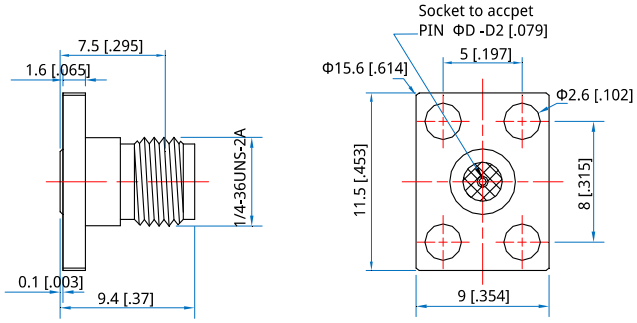


Part Number	ΦD
QCS-FL4G-S23-02	0.23 [.009]
QCS-FL4G-S30-02	0.3 [.012]
QCS-FL4G-S38-02	0.38 [.015]
QCS-FL4G-S46-02	0.46 [.018]
QCS-FL4G-S51-02	0.51 [.02]
QCS-FL4G-S91-02	0.91 [.036]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

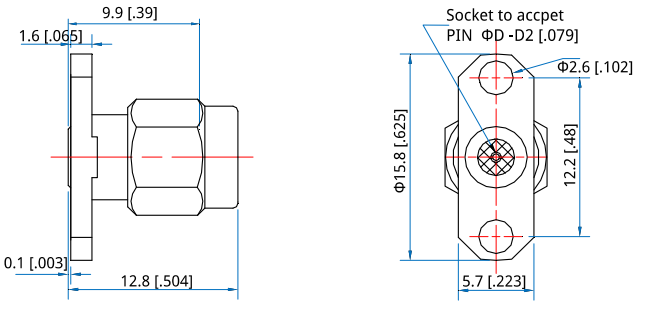


Part Number	ΦD
QCS-FL4G-S23-03	0.23 [.009]
QCS-FL4G-S30-03	0.3 [.012]
QCS-FL4G-S38-03	0.38 [.015]
QCS-FL4G-S46-03	0.46 [.018]
QCS-FL4G-S51-03	0.51 [.02]
QCS-FL4G-S91-03	0.91 [.036]

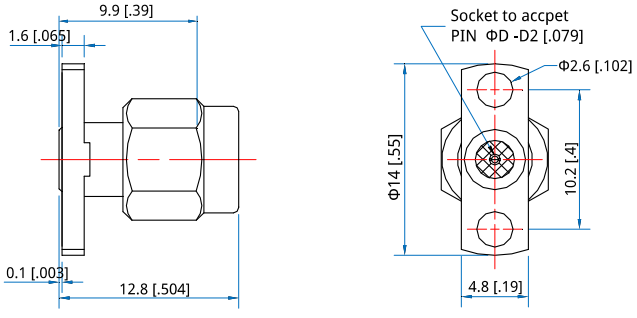


Part Number	ΦD
QCS-FL4G-S23-04	0.23 [.009]
QCS-FL4G-S30-04	0.3 [.012]
QCS-FL4G-S38-04	0.38 [.015]
QCS-FL4G-S46-04	0.46 [.018]
QCS-FL4G-S51-04	0.51 [.02]

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

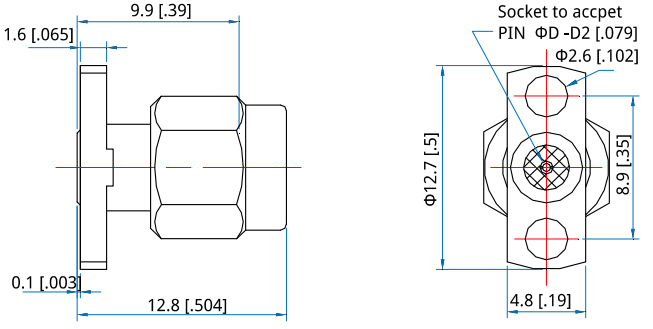


Part Number	ΦD
QCS-ML2G-S23-01	0.23 [.009]
QCS-ML2G-S30-01	0.3 [.012]
QCS-ML2G-S38-01	0.38 [.015]
QCS-ML2G-S46-01	0.46 [.018]
QCS-ML2G-S51-01	0.51 [.02]

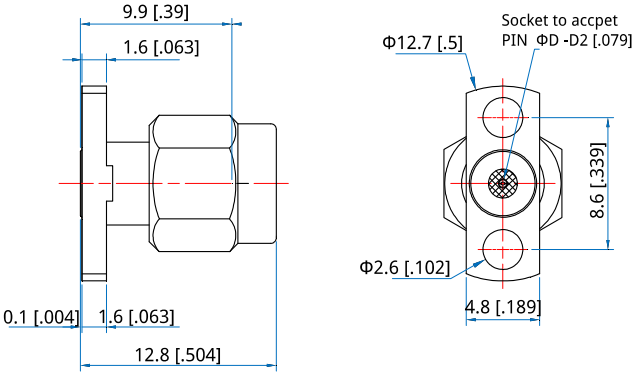


Part Number	ΦD
QCS-ML2G-S23-02	0.23 [.009]
QCS-ML2G-S30-02	0.3 [.012]
QCS-ML2G-S38-02	0.38 [.015]
QCS-ML2G-S46-02	0.46 [.018]
QCS-ML2G-S51-02	0.51 [.02]

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

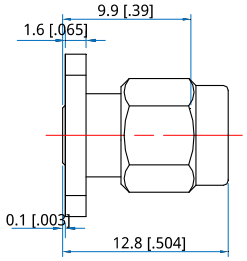


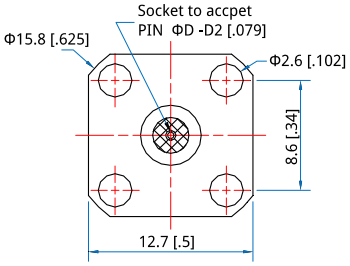
Part Number	ΦD
QCS-ML2G-S23-03	0.23 [.009]
QCS-ML2G-S30-03	0.3 [.012]
QCS-ML2G-S38-03	0.38 [.015]
QCS-ML2G-S46-03	0.46 [.018]
QCS-ML2G-S51-03	0.51 [.02]



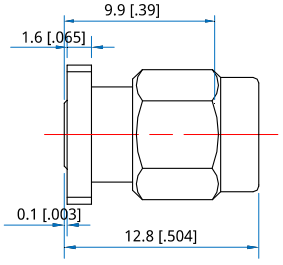
Part Number	ΦD
QCS-ML2G-S23-04	0.23 [.009]
QCS-ML2G-S30-04	0.3 [.012]
QCS-ML2G-S38-04	0.38 [.015]
QCS-ML2G-S46-04	0.46 [.018]
QCS-ML2G-S51-04	0.51 [.02]

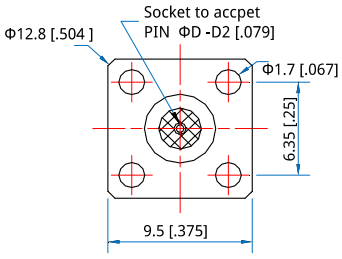
SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





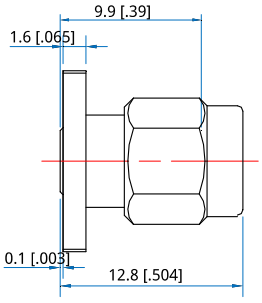
Part Number	ΦD
QCS-ML4G-S23-01	0.23 [.009]
QCS-ML4G-S30-01	0.3 [.012]
QCS-ML4G-S38-01	0.38 [.015]
QCS-ML4G-S46-01	0.46 [.018]
QCS-ML4G-S51-01	0.51 [.02]

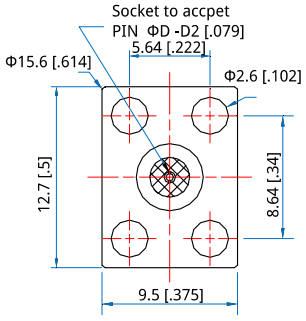




Part Number	ΦD
QCS-ML4G-S23-02	0.23 [.009]
QCS-ML4G-S30-02	0.3 [.012]
QCS-ML4G-S38-02	0.38 [.015]
QCS-ML4G-S46-02	0.46 [.018]
QCS-ML4G-S51-02	0.51 [.02]

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

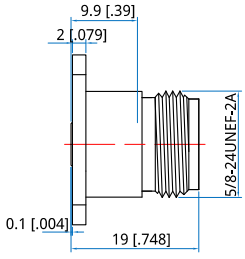


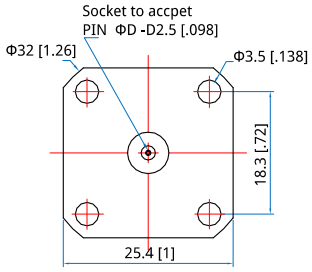


Part Number	ΦD
QCS-ML4G-S23-03	0.23 [.009]
QCS-ML4G-S30-03	0.3 [.012]
QCS-ML4G-S38-03	0.38 [.015]
QCS-ML4G-S46-03	0.46 [.018]
QCS-ML4G-S51-03	0.51 [.02]

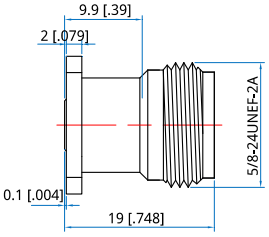
N Series

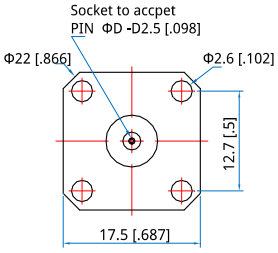
N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





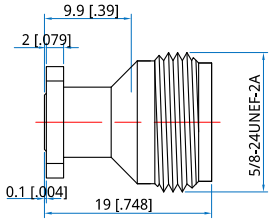
Part Number	ΦD
QCN-FL4G-S46-01	0.46 [.018]
QCN-FL4G-S51-01	0.51 [.02]
QCN-FL4G-S91-01	0.91 [.036]

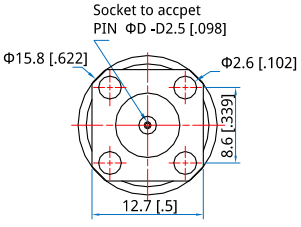




Part Number	ΦD
QCN-FL4G-S46-02	0.46 [.018]
QCN-FL4G-S51-02	0.51 [.02]
QCN-FL4G-S91-02	0.91 [.036]

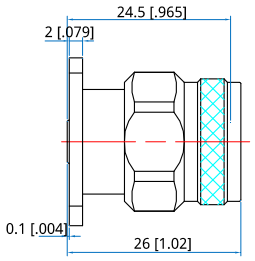
N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

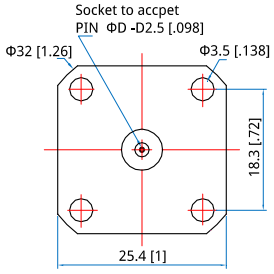




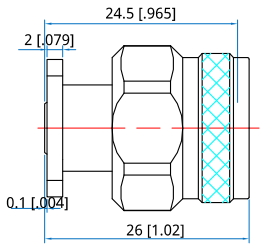
Part Number	ΦD
QCN-FL4G-S46-03	0.46 [.018]
QCN-FL4G-S51-03	0.51 [.02]
QCN-FL4G-S91-03	0.91 [.036]

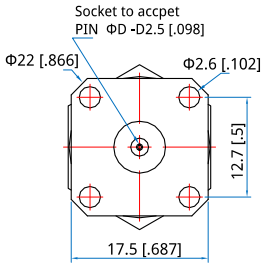
N Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





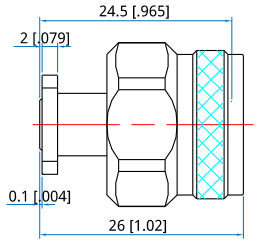
Part Number	ΦD
QCN-ML4G-S46-01	0.46 [.018]
QCN-ML4G-S51-01	0.51 [.02]
QCN-ML4G-S91-01	0.91 [.036]

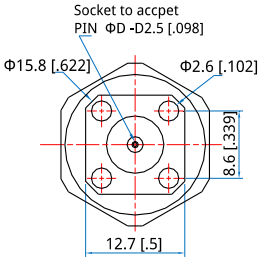




Part Number	D
QCN-ML4G-S46-02	0.46 [.018]
QCN-ML4G-S51-02	0.51 [.02]
QCN-ML4G-S91-02	0.91 [.036]

N Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

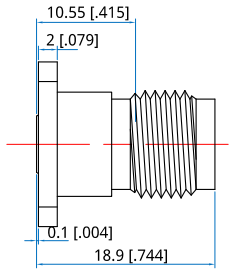


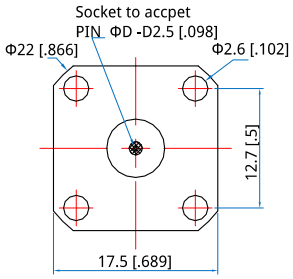


Part Number	ΦD
QCN-ML4G-S46-03	0.46 [.018]
QCN-ML4G-S51-03	0.51 [.02]
QCN-ML4G-S91-03	0.91 [.036]

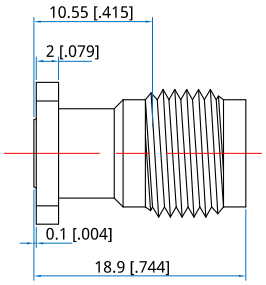
TNC Series

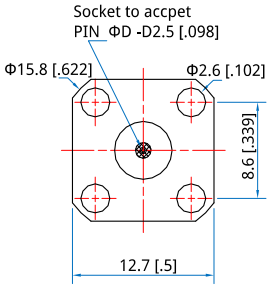
TNC Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





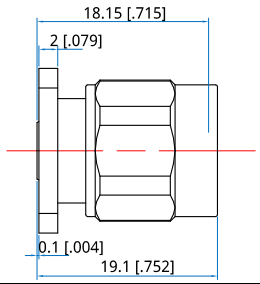
Part Number	ΦD
QCT-FL4G-S46-01	0.46 [.018]
QCT-FL4G-S51-01	0.51 [.02]
QCT-FL4G-S91-01	0.91 [.036]

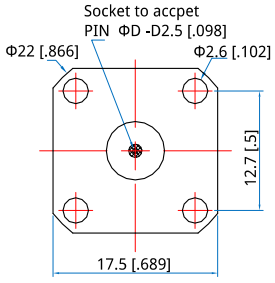




Part Number	ΦD
QCT-FL4G-S46-02	0.46 [.018]
QCT-FL4G-S51-02	0.51 [.02]
QCT-FL4G-S91-02	0.91 [.036]

TNC Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)



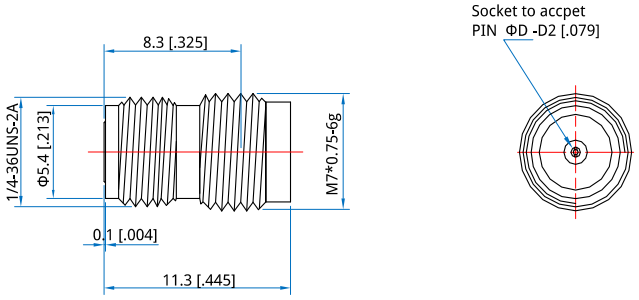


Part Number	ΦD
QCT-ML4G-S46-01	0.46 [.018]
QCT-ML4G-S51-01	0.51 [.02]
QCT-ML4G-S91-01	0.91 [.036]

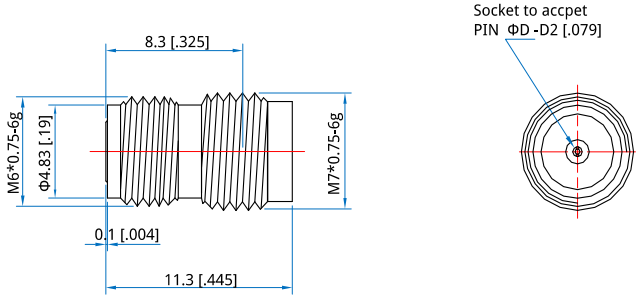
Threaded Connection

1.85mm Series

1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)



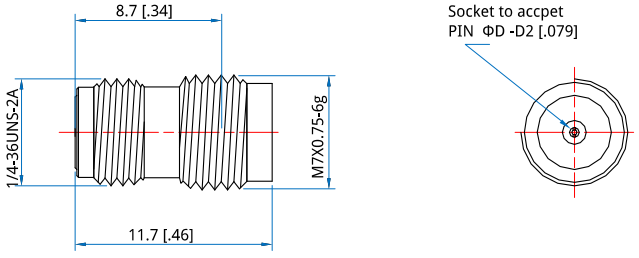
Part Number	ΦD
QCV-FYG-S23-01	0.23 [.009]
QCV-FYG-S30-01	0.3 [.012]



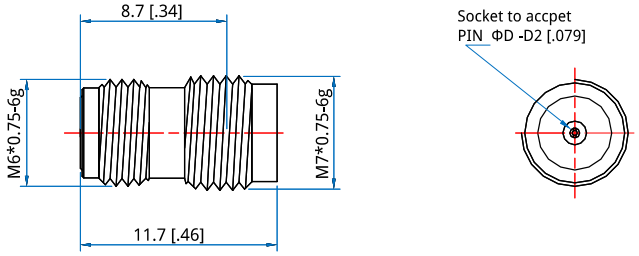
Part Number	ΦD
QCV-FYG-S23-02	0.23 [.009]
QCV-FYG-S30-02	0.3 [.012]

2.4mm Series

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)



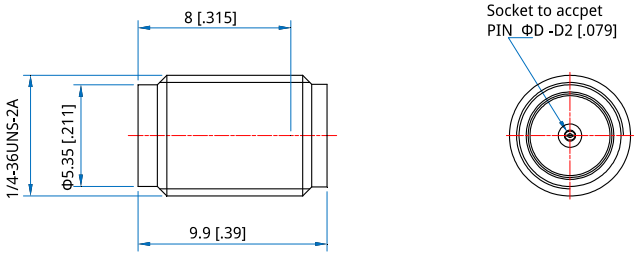
Part Number	ΦD
QC2-FYG-S23-01	0.23 [.009]
QC2-FYG-S30-01	0.3 [.012]
QC2-FYG-S51-01	0.51 [.02]



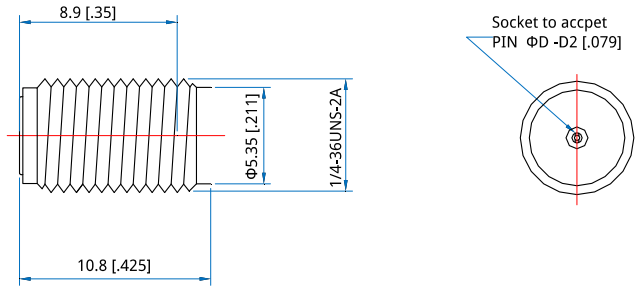
Part Number	ΦD
QC2-FYG-S23-02	0.23 [.009]
QC2-FYG-S30-02	0.3 [.012]
QC2-FYG-S51-02	0.51 [.02]

2.92mm Series

2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)



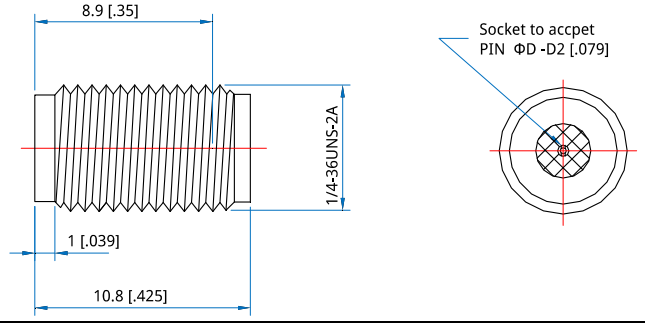
Part Number	ΦD
QCK-FYG-S23-01	0.23 [.009]
QCK-FYG-S30-01	0.3 [.012]
QCK-FYG-S38-01	0.38 [.015]
QCK-FYG-S46-01	0.46 [.018]
QCK-FYG-S51-01	0.51 [.02]



Part Number	ΦD
QCK-FYG-S23-02	0.23 [.009]
QCK-FYG-S30-02	0.3 [.012]
QCK-FYG-S38-02	0.38 [.015]
QCK-FYG-S46-02	0.46 [.018]
QCK-FYG-S51-02	0.51 [.02]

SMA Series

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



Part Number	ΦD
QCS-FYG-S23-01	0.23 [.009]
QCS-FYG-S30-01	0.3 [.012]
QCS-FYG-S38-01	0.38 [.015]
QCS-FYG-S46-01	0.46 [.018]
QCS-FYG-S51-01	0.51 [.02]

Straight Terminal With Metal Connectors

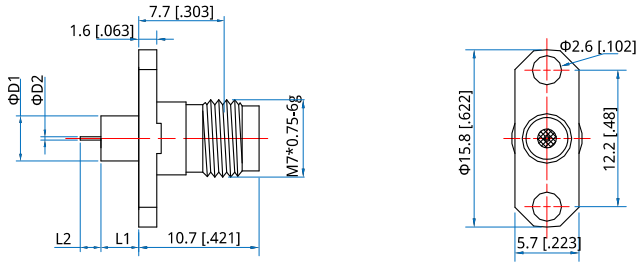
Qualwave provides various straight terminal with metal connectors, including 2.4mm, 2.92mm, SMP, SSMA, SMA, N, TNC etc to meet different requirements. The frequency range covers DC~50GHz.

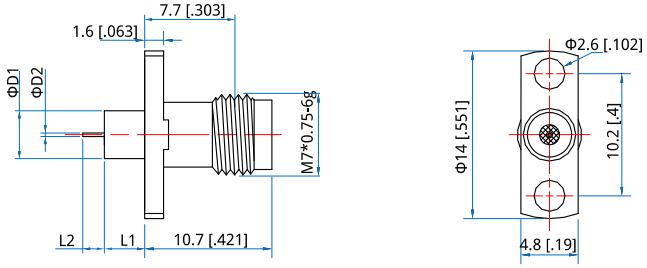
Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Flange Mount

2.4mm Series

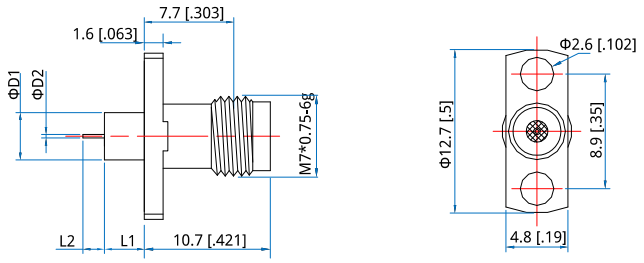
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





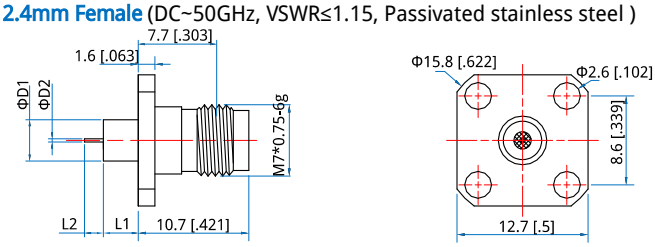
Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QC2-FL2G-M30-01	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QC2-FL2G-M30-03	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL2G-M30-02	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]	QC2-FL2G-M30-04	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]

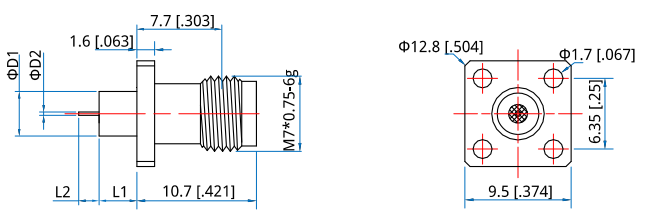
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)



Part Number	ΦD1	ΦD2	L1	L2
QC2-FL2G-M30-05	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL2G-M30-06	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

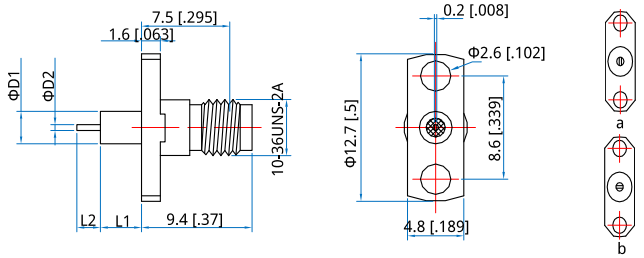


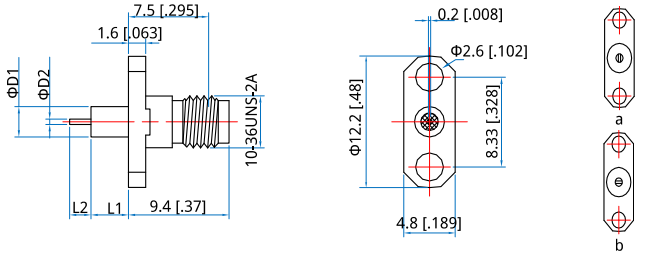


Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QC2-FL4G-M30-01	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QC2-FL4G-M30-03	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL4G-M30-02	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]	QC2-FL4G-M30-04	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]

SSMA Series

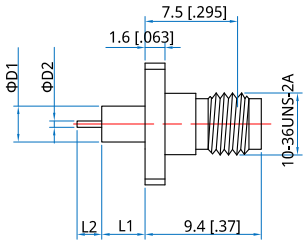
SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)

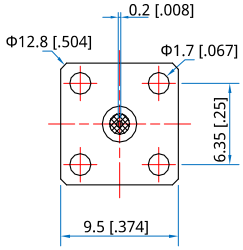




Part Number	ΦD1	ΦD2	L1	L2		Part Number	ΦD1	ΦD2	L1	L2	
QCA-FL2G-M60-01	2.8 [.11]	0.6 [.024]	3.1 [.122]	2 [.079]	a	QCA-FL2G-M60-03	2.8 [.11]	0.6 [.024]	3.1 [.122]	2 [.079]	a
QCA-FL2G-M60-02	2.8 [.11]	0.6 [.024]	3.1 [.122]	2 [.079]	b	QCA-FL2G-M60-04	2.8 [.11]	0.6 [.024]	3.1 [.122]	2 [.079]	b

SSMA Female (DC~40GHz, VSWR≤1.2, Passivated stainless steel)

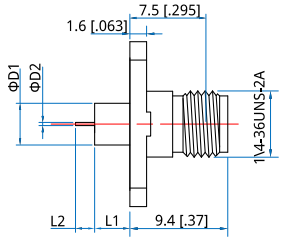


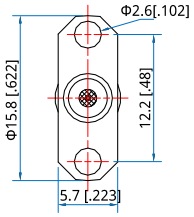


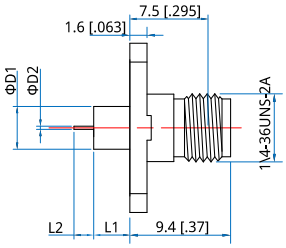
Part Number	ΦD1	ΦD2	L1	L2
QCA-FL4G-M60-01	2.8 [.11]	0.6 [.024]	3.1 [.122]	2 [.079]

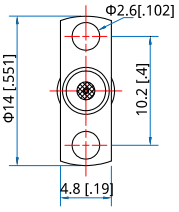
2.92mm Series

2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)



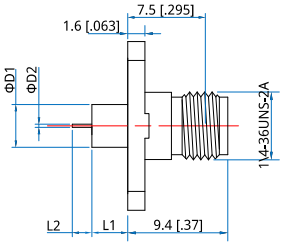


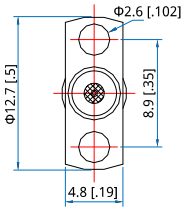


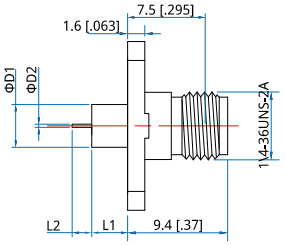


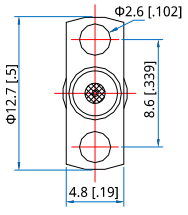
Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-M30-01	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QCK-FL2G-M30-05	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-M30-02	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]	QCK-FL2G-M30-06	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-M60-03	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]	QCK-FL2G-M60-07	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]
QCK-FL2G-M30-04	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]	QCK-FL2G-M30-08	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]

2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)



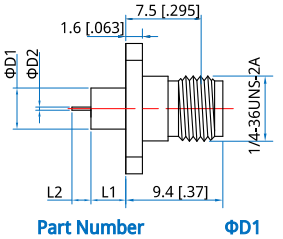


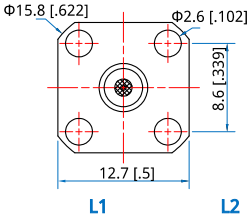


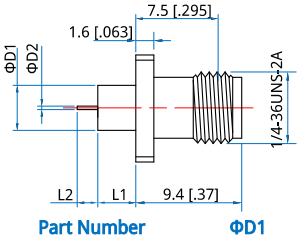


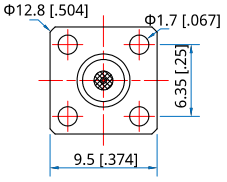
Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-M30-09	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QCK-FL2G-M30-13	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-M30-10	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]	QCK-FL2G-M30-14	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-M60-11	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]	QCK-FL2G-M60-15	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]
QCK-FL2G-M30-12	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]	QCK-FL2G-M30-16	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]

2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)



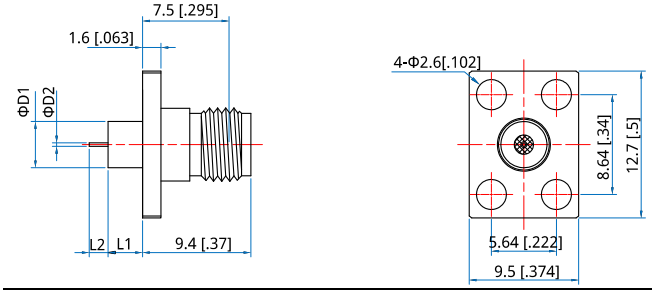






Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QCK-FL4G-M30-01	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QCK-FL4G-M30-05	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL4G-M30-02	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]	QCK-FL4G-M30-06	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL4G-M60-03	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]	QCK-FL4G-M60-07	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]
QCK-FL4G-M30-04	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]	QCK-FL4G-M30-08	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]

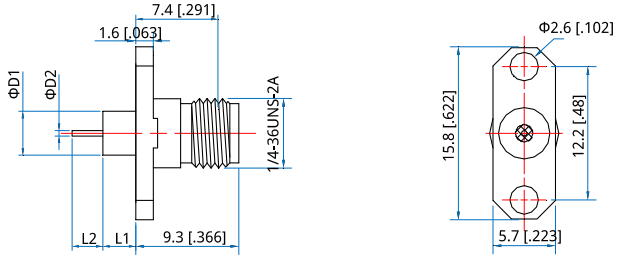
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

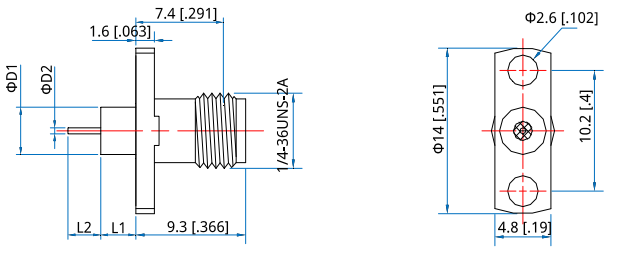


Part Number	ΦD1	ΦD2	L1	L2
QCK-FL4G-M30-09	4 [.158]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL4G-M30-10	4 [.158]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL4G-M60-11	4 [.158]	0.6 [.024]	10.1 [.398]	1.27 [.05]
QCK-FL4G-M30-12	4 [.158]	0.3 [.012]	3.2 [.126]	1.5 [.059]

SMA Series

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

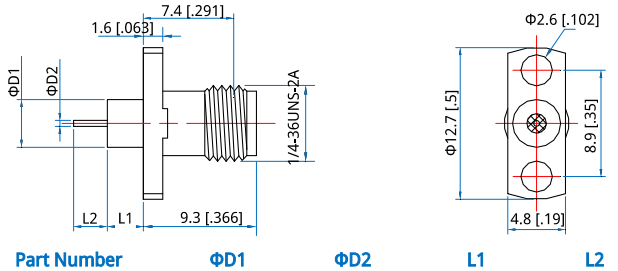


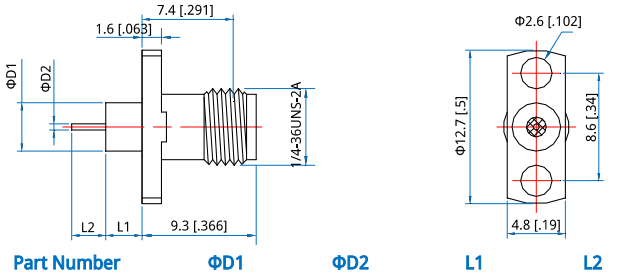


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-M80-01	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL2G-M38-02	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL2G-M38-03	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL2G-M38-04	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-M80-05	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL2G-M38-06	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL2G-M38-07	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL2G-M38-08	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

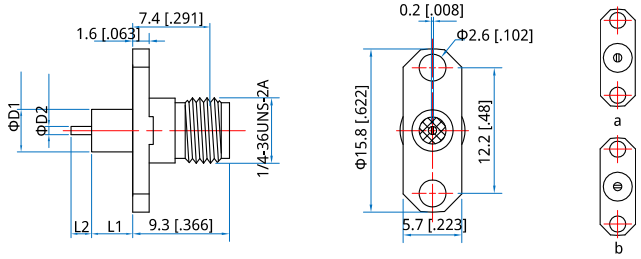


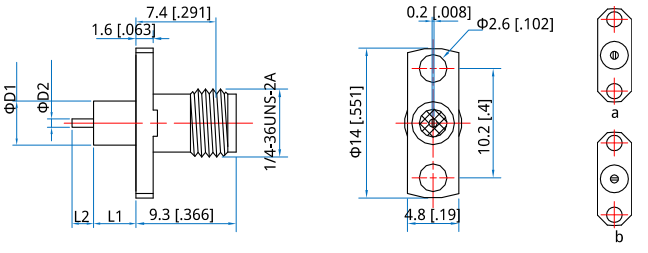


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-M80-09	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL2G-M38-10	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL2G-M38-11	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL2G-M38-12	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-M80-13	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL2G-M38-14	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL2G-M38-15	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL2G-M38-16	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

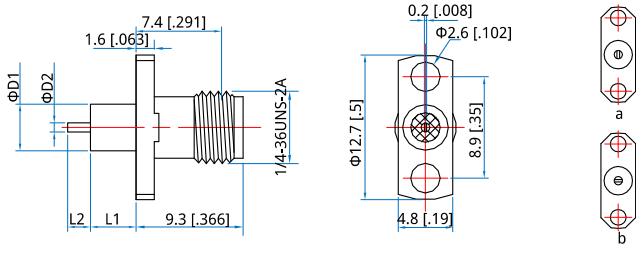




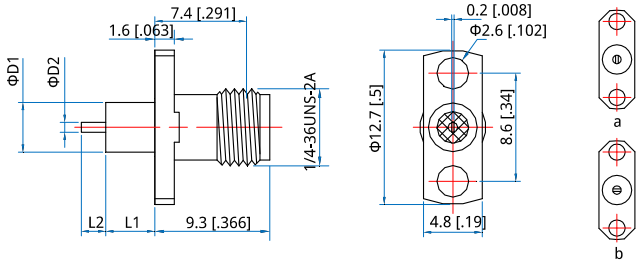
Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL2G-M80-17	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL2G-M80-18	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL2G-M80-19	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL2G-M80-20	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

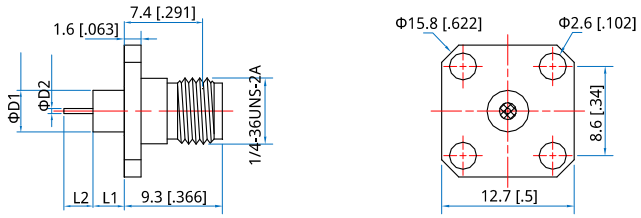


Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL2G-M80-21	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL2G-M80-22	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

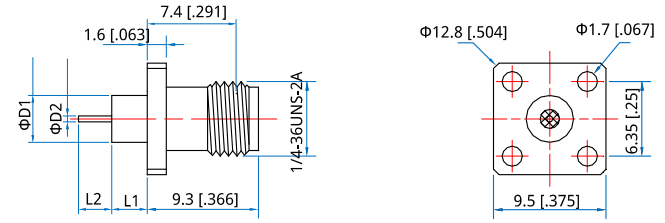


Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL2G-M80-23	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL2G-M80-24	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

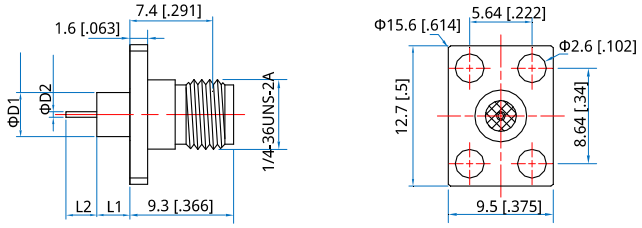


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M80-01	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL4G-M38-02	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL4G-M38-03	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL4G-M38-04	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

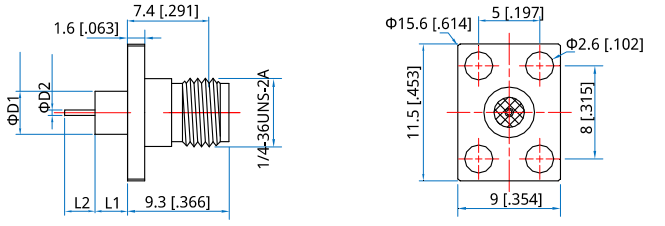


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M80-05	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL4G-M38-06	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL4G-M38-07	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL4G-M38-08	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

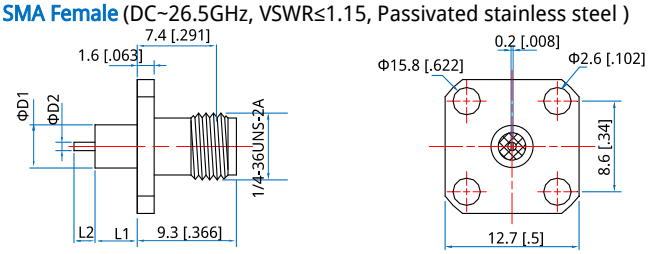


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M80-09	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL4G-M38-10	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL4G-M38-11	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL4G-M38-12	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

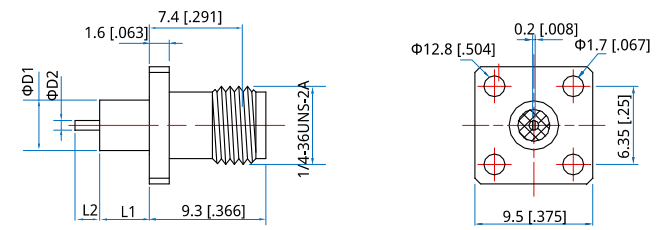


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M80-13	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]
QCS-FL4G-M38-14	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]
QCS-FL4G-M38-15	4 [.158]	0.38 [.015]	3 [.118]	3 [.118]
QCS-FL4G-M38-16	4 [.158]	0.38 [.015]	3 [.118]	0.4 [.016]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

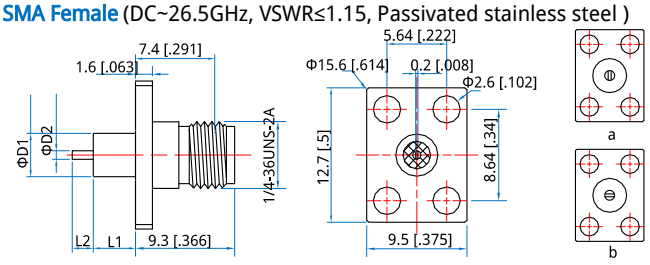


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M100-17	6 [.236]	1 [.039]	4 [.158]	1.5 [.059]
QCS-FL4G-M80-18	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]

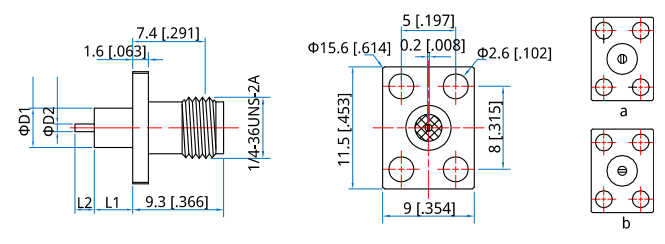


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-M80-19	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

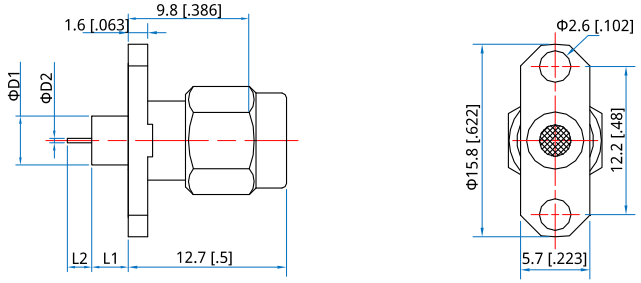


Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL4G-M80-20	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL4G-M80-21	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

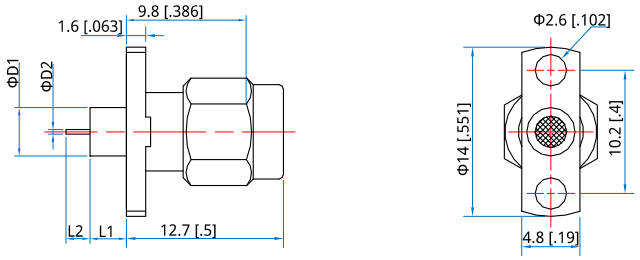


Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL4G-M80-22	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	a
QCS-FL4G-M80-23	4 [.158]	0.8 [.031]	4 [.158]	1.5 [.059]	b

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

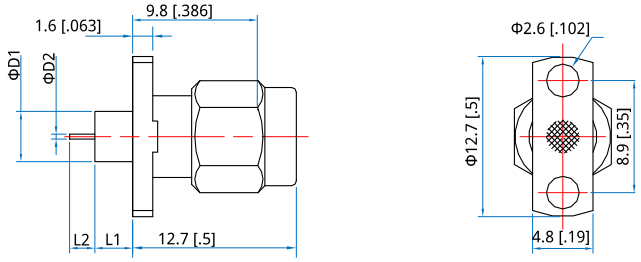


Part Number	ΦD1	ΦD2	L1	L2
QCS-ML2G-M38-01	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

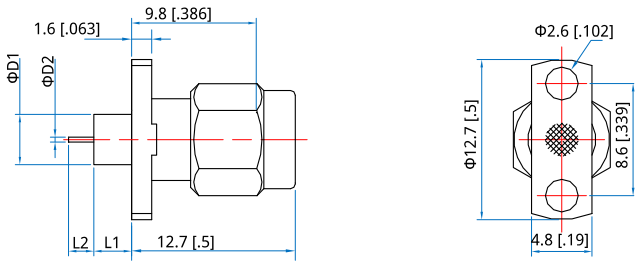


Part Number	ΦD1	ΦD2	L1	L2
QCS-ML2G-M38-02	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

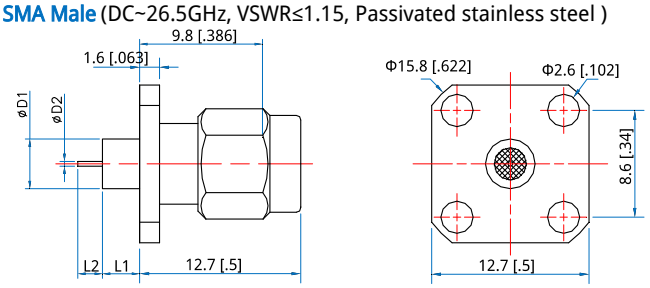


Part Number	ΦD1	ΦD2	L1	L2
QCS-ML2G-M38-03	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

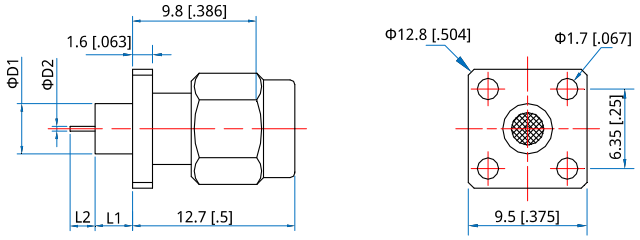


Part Number	ΦD1	ΦD2	L1	L2
QCS-ML2G-M38-04	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

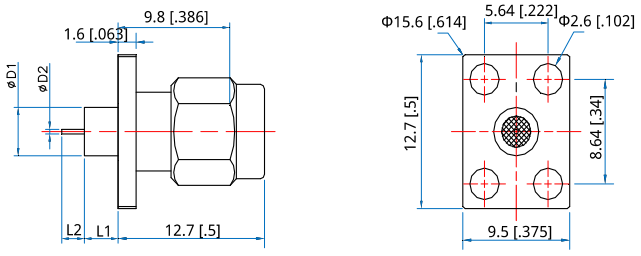


Part Number	ΦD1	ΦD2	L1	L2
QCS-ML4G-M38-01	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]



Part Number	ΦD1	ΦD2	L1	L2
QCS-ML4G-M38-02	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

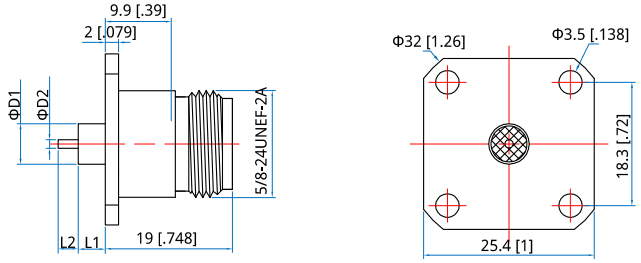
SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



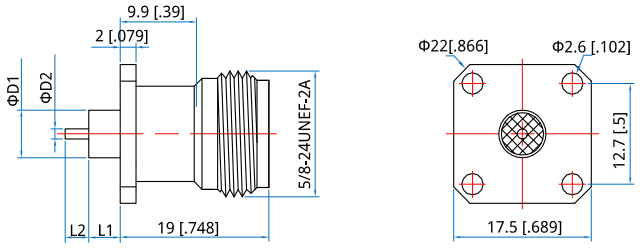
Part Number	ΦD1	ΦD2	L1	L2
QCS-ML4G-M38-03	4 [.158]	0.38 [.015]	3 [.118]	2 [.079]

N Series

N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

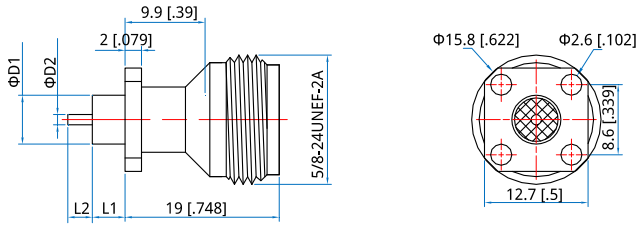


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-M127-01	6 [.236]	1.27 [.05]	4 [.158]	2 [.079]

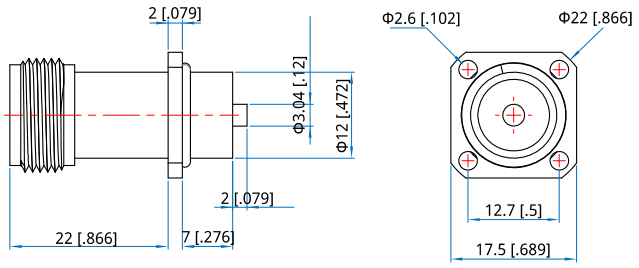


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-M127-02	6 [.236]	1.27 [.05]	4 [.158]	2 [.079]

N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

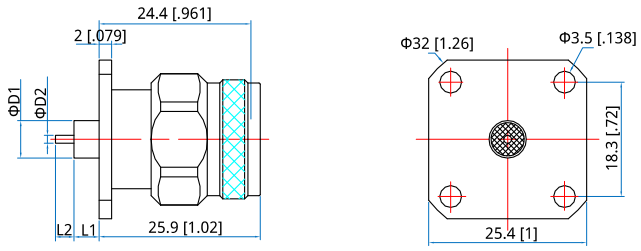


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-M127-03	6 [.236]	1.27 [.05]	4 [.158]	2 [.079]

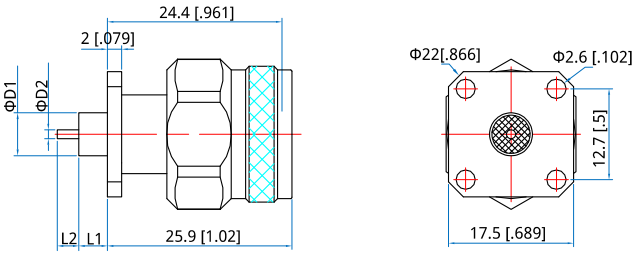


Part Number
QCN-FL4G-M304-01 (VSWR≤1.2)

N Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)



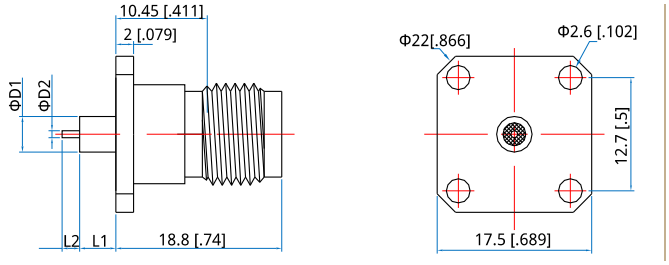
Part Number	ΦD1	ΦD2	L1	L2
QCN-ML4G-M127-01	6 [.236]	1.27 [.05]	4 [.158]	2 [.079]



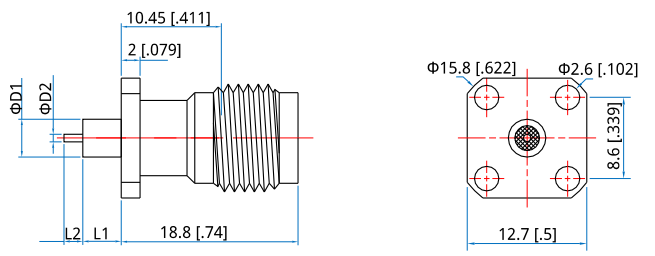
Part Number	ΦD1	ΦD2	L1	L2
QCN-ML4G-M127-02	6 [.236]	1.27 [.05]	4 [.158]	2 [.079]

TNC Series

TNC Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)



Part Number	ΦD1	ΦD2	L1	L2
QCT-FL4G-M80-01	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]

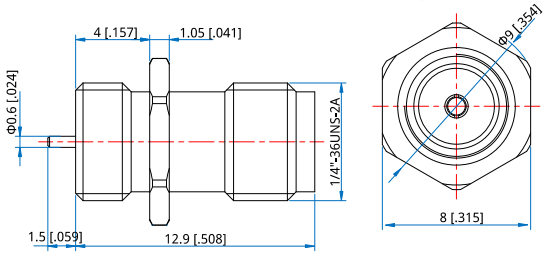


Part Number	ΦD1	ΦD2	L1	L2
QCT-FL4G-M80-02	4 [.158]	0.8 [.031]	4 [.158]	2 [.079]

Threaded Connection

SMA Series

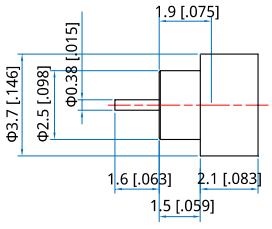
SMA Female (DC~6GHz, VSWR≤1.25, Ternary alloy plated brass)



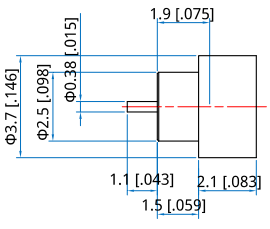
Part Number
QCS-FYB-M60

SMP, Full Detent

SMP Male (DC~40GHz, VSWR≤1.3, Gold Plated Kovar Material)

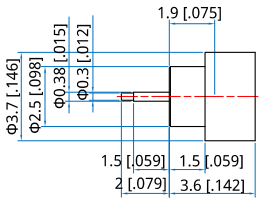


Part Number
QCPF-MB-M38-01



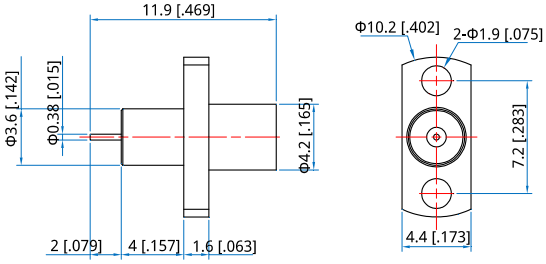
Part Number
QCPF-MB-M38-02

SMP Male (DC~40GHz, VSWR≤1.3, Gold Plated Kovar Material)



Part Number

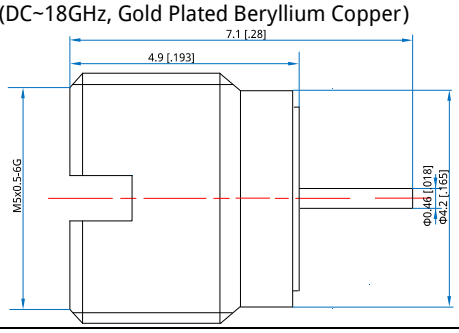
QCPF-MB-M38-03



Part Number

QCPF-ML2G-M38-01 (Passivated stainless steel)

SMP Male (DC~18GHz, Gold Plated Beryllium Copper)

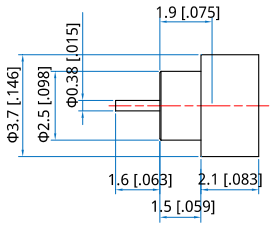


Part Number

QCPF-MB-M46-01

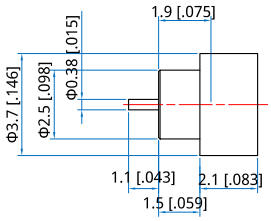
SMP, Limited Detent

SMP Male (DC~40GHz, VSWR≤1.3, Gold Plated Kovar Material)



Part Number

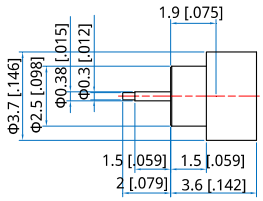
QCPL-MB-M38-01



Part Number

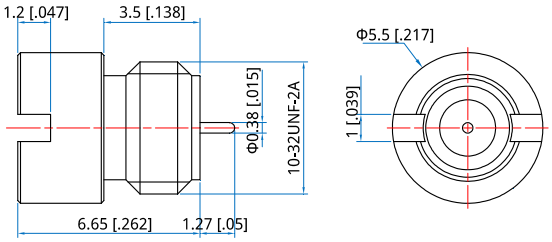
QCPL-MB-M38-02

SMP Male (DC~40GHz, VSWR≤1.3, Gold Plated Kovar Material)



Part Number

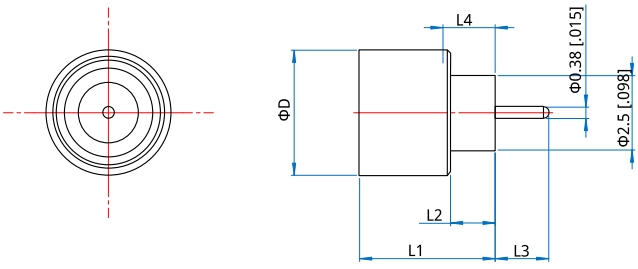
QCPL-MB-M38-03



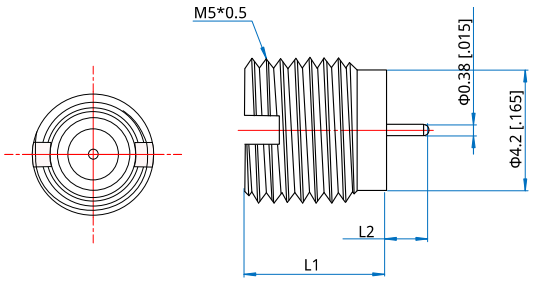
Part Number

QCPL-MYB-M38-01 (Threaded Connection)

SMP Male (DC~40GHz, VSWR≤1.25, Kovar Material)



Part Number	ΦD	L1	L2	L3	L4
QCPL-MO-M38-01	4.2 [.165]	4.55 [.179]	1.5 [.059]	1.8 [.071]	1.75 [.069]
QCPL-MO-M38-02	3.7 [.146]	3.6 [.142]	1.5 [.059]	2.8 [.11]	1.9 [.075]
QCPL-MO-M38-03	3.7 [.146]	3.6 [.142]	1.6 [.063]	1.6 [.063]	-



Part Number	L1	L2
QCPL-MO-M38-04	4.9 [.193]	1.5 [.059]
QCPL-MO-M38-05	4.9 [.193]	3.5 [.138]

Straight Terminal With Dielectric Connectors

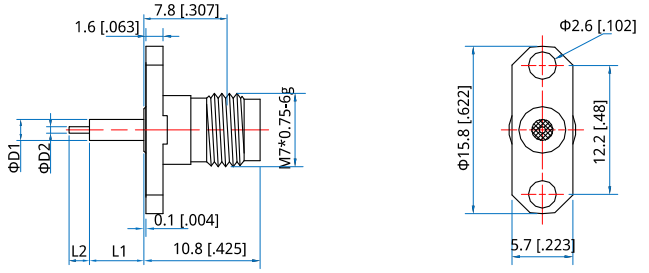
Qualwave provides various straight terminal with dielectric connectors, including 2.4mm, 2.92mm, SMA, N, etc to meet different requirements. The frequency range covers DC~50GHz.

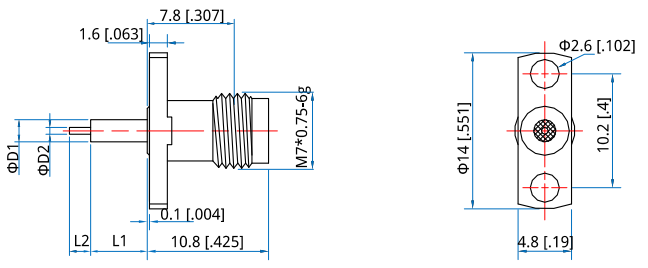
Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Flange Mount

2.4mm Series

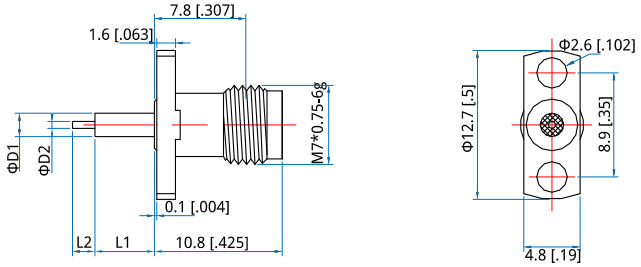
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





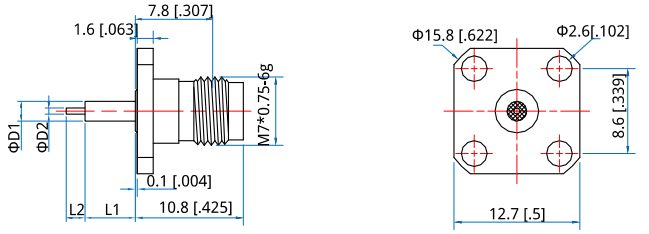
Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QC2-FL2G-P30-01	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QC2-FL2G-P30-05	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL2G-P30-02	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]	QC2-FL2G-P30-06	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QC2-FL2G-P60-03	2 [.079]	0.6 [.024]	6.35 [.25]	1.27 [.05]	QC2-FL2G-P60-07	2 [.079]	0.6 [.024]	6.35 [.25]	1.27 [.05]
QC2-FL2G-P60-04	2 [.079]	0.6 [.024]	5.1 [.201]	1.9 [.075]	QC2-FL2G-P60-08	2 [.079]	0.6 [.024]	5.1 [.201]	1.9 [.075]

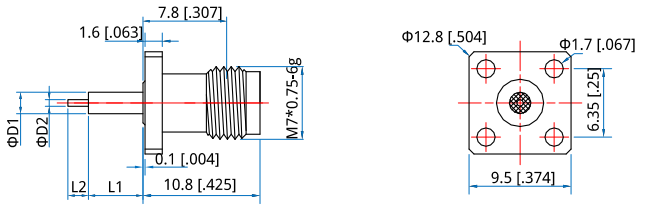
2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)



Part Number	ΦD1	ΦD2	L1	L2
QC2-FL2G-P30-09	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL2G-P30-10	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QC2-FL2G-P60-11	2 [.079]	0.6 [.024]	6.35 [.25]	1.27 [.05]
QC2-FL2G-P60-12	2 [.079]	0.6 [.024]	5.1 [.201]	1.9 [.075]

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

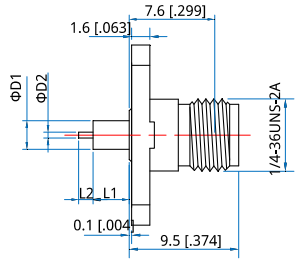


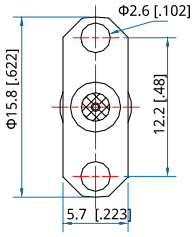


Part Number	ΦD1	ΦD2	L1	L2	Part Number	ΦD1	ΦD2	L1	L2
QC2-FL4G-P30-01	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]	QC2-FL4G-P30-05	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QC2-FL4G-P30-02	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]	QC2-FL4G-P30-06	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QC2-FL4G-P60-03	2 [.079]	0.6 [.024]	6.35 [.25]	1.27 [.05]	QC2-FL4G-P60-07	2 [.079]	0.6 [.024]	6.35 [.25]	1.27 [.05]
QC2-FL4G-P60-04	2 [.079]	0.6 [.024]	5.1 [.201]	1.9 [.075]	QC2-FL4G-P60-08	2 [.079]	0.6 [.024]	5.1 [.201]	1.9 [.075]

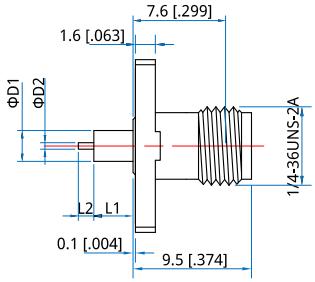
2.92mm Series

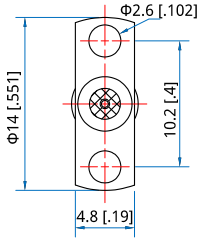
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





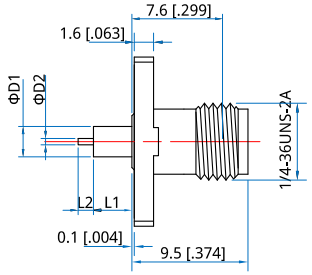
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-P30-01	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-P30-02	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-P30-03	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

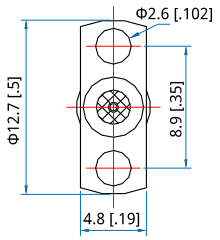




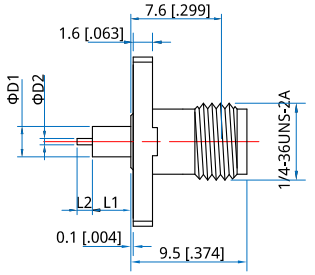
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-P30-04	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-P30-05	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-P30-06	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

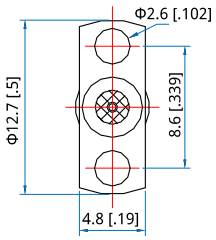
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





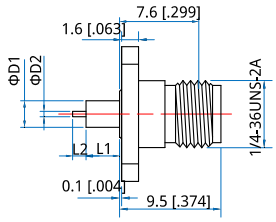
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-P30-07	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-P30-08	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-P30-09	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

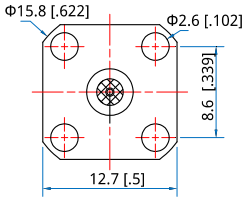




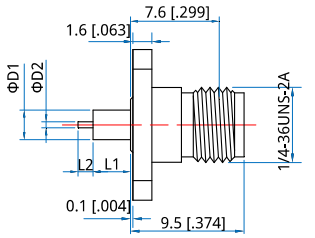
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL2G-P30-10	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL2G-P30-11	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL2G-P30-12	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

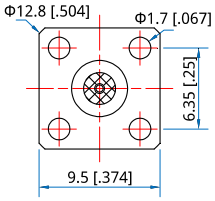
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





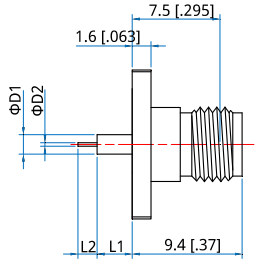
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL4G-P30-01	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL4G-P30-02	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL4G-P30-03	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

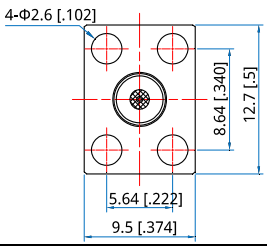




Part Number	ΦD1	ΦD2	L1	L2
QCK-FL4G-P30-04	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL4G-P30-05	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL4G-P30-06	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

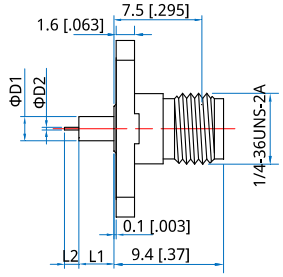


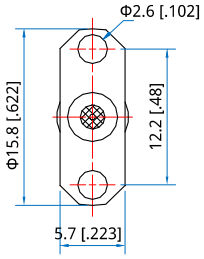


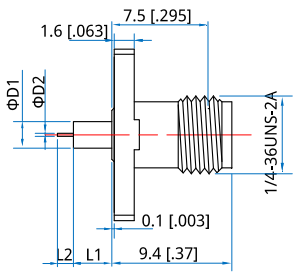
Part Number	ΦD1	ΦD2	L1	L2
QCK-FL4G-P30-07	1.67 [.066]	0.3 [.012]	1.4 [.055]	1.5 [.059]
QCK-FL4G-P30-08	1.67 [.066]	0.3 [.012]	3 [.118]	1.5 [.059]
QCK-FL4G-P30-09	1.67 [.066]	0.3 [.012]	3 [.118]	4.5 [.177]

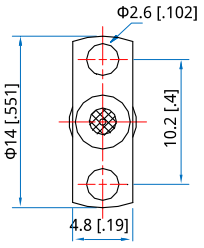
SMA Series

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





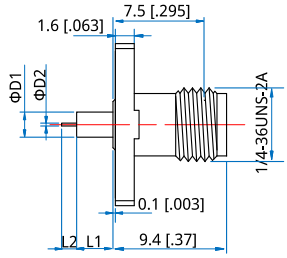


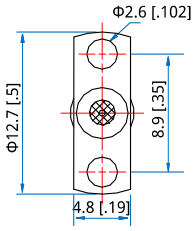


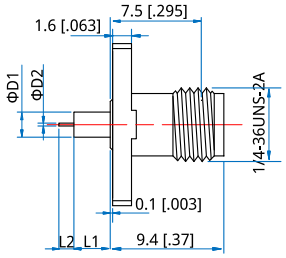
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P30-01	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL2G-P64-02	3.9 [.154]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL2G-P64-03	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL2G-P30-04	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]

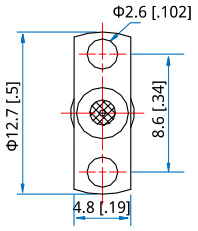
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P30-05	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL2G-P64-06	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL2G-P30-07	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





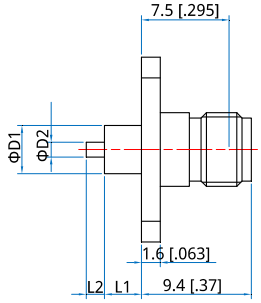


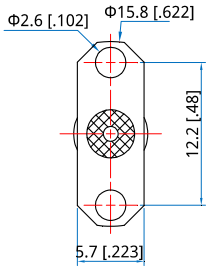


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P30-08	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL2G-P64-09	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL2G-P30-10	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]

Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P30-11	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL2G-P64-12	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL2G-P30-13	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]

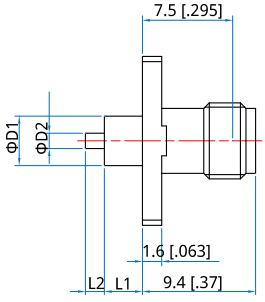
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

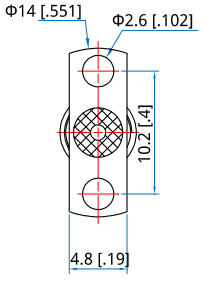




Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P127-14	4.1 [.161]	1.27 [.05]	3.17 [.125]	1.57 [.062]
QCS-FL2G-P127-15	4.1 [.161]	1.27 [.05]	5 [.197]	2 [.079]
QCS-FL2G-P127-16	4.1 [.161]	1.27 [.05]	5 [.197]	24 [.945]

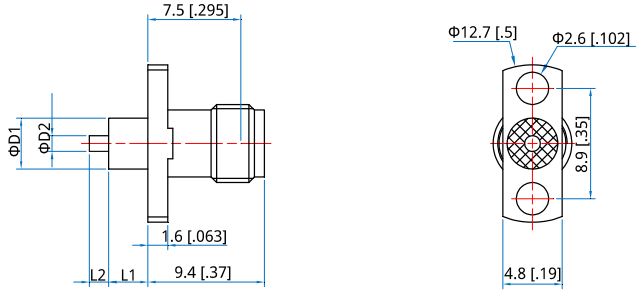
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





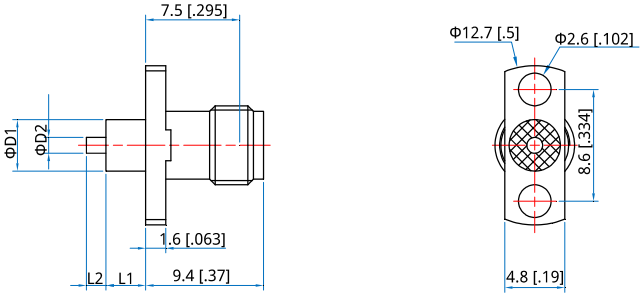
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P127-17	4.1 [.161]	1.27 [.05]	3.17 [.125]	1.57 [.062]
QCS-FL2G-P127-18	4.1 [.161]	1.27 [.05]	5 [.197]	2 [.079]
QCS-FL2G-P127-19	4.1 [.161]	1.27 [.05]	5 [.197]	24 [.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



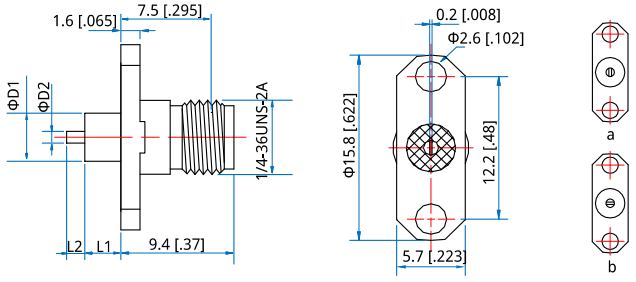
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P127-20	4.1[.161]	1.27[.05]	3.17[.125]	1.57[.062]
QCS-FL2G-P127-21	4.1[.161]	1.27[.05]	5[.197]	2[.079]
QCS-FL2G-P127-22	4.1[.161]	1.27[.05]	5[.197]	24[.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



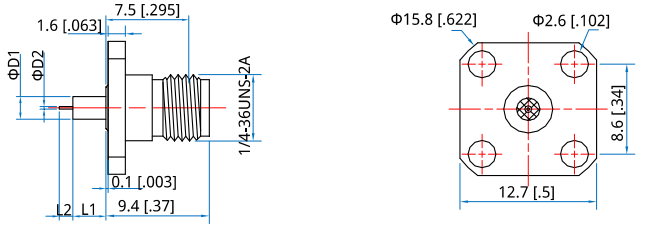
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL2G-P127-23	4.1[.161]	1.27[.05]	3.17[.125]	1.57[.062]
QCS-FL2G-P127-24	4.1[.161]	1.27[.05]	5[.197]	2[.079]
QCS-FL2G-P127-25	4.1[.161]	1.27[.05]	5[.197]	24[.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

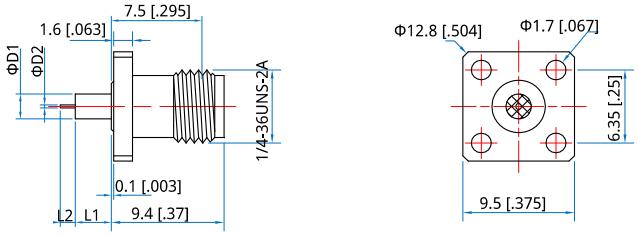


Part Number	ΦD1	ΦD2	L1	L2	
QCS-FL2G-P100-26	4.1 [.161]	1 [.04]	4 [.158]	1.5 [.059]	a
QCS-FL2G-P100-27	4.1 [.161]	1 [.04]	4 [.158]	1.5 [.059]	b
QCS-FL2G-P100-28	4.1 [.161]	1 [.04]	3 [.118]	1.5 [.059]	a
QCS-FL2G-P100-29	4.1 [.161]	1 [.04]	3 [.118]	1.5 [.059]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

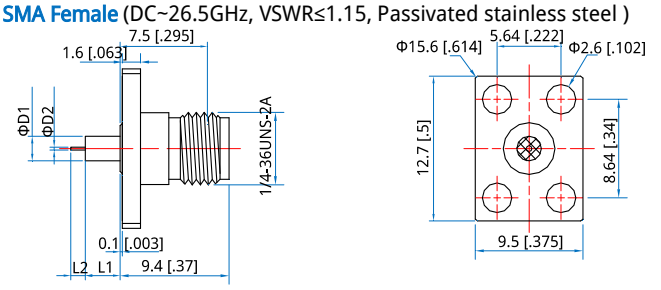


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P30-01	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL4G-P30-02	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]
QCS-FL4G-P64-03	3.9 [.154]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL4G-P64-04	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]

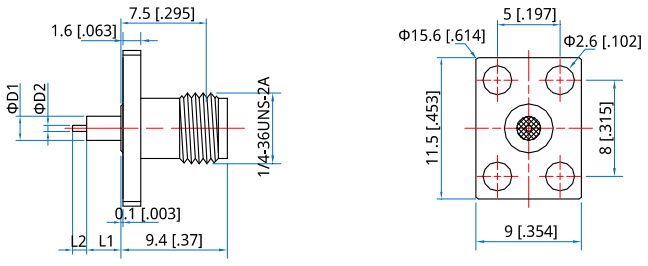


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P30-05	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL4G-P30-06	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]
QCS-FL4G-P64-07	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

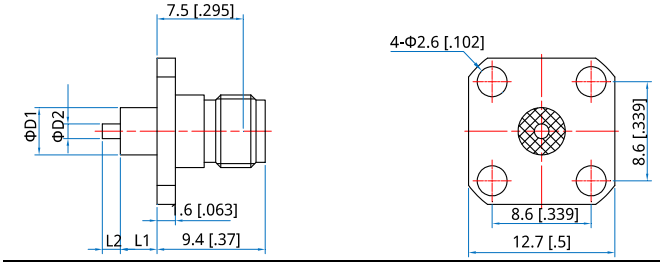


Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P30-08	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL4G-P64-09	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL4G-P30-10	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]



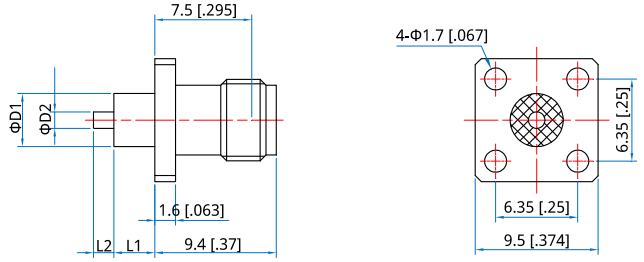
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P30-11	2.2 [.087]	0.3 [.012]	3.2 [.126]	1.27 [.05]
QCS-FL4G-P64-12	2.1 [.083]	0.64 [.025]	15 [.591]	3 [.118]
QCS-FL4G-P30-13	2.2 [.087]	0.3 [.012]	4.3 [.169]	1.3 [.051]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



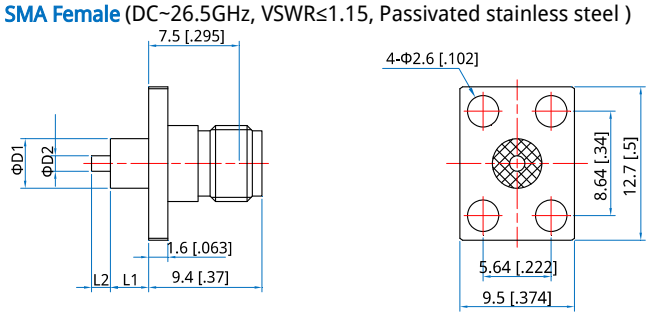
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P127-14	4.1 [.161]	1.27 [.05]	3.17 [.125]	1.57 [.062]
QCS-FL4G-P127-15	4.1 [.161]	1.27 [.05]	5 [.197]	2 [.079]
QCS-FL4G-P127-16	4.1 [.161]	1.27 [.05]	5 [.197]	24 [.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



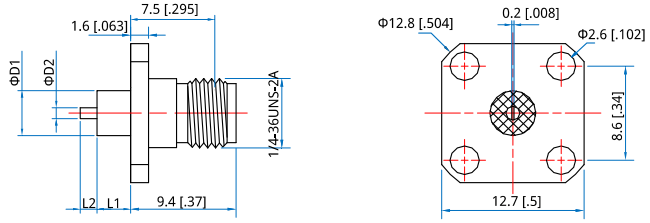
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P127-17	4.1 [.161]	1.27 [.05]	3.17 [.125]	1.57 [.062]
QCS-FL4G-P127-18	4.1 [.161]	1.27 [.05]	5 [.197]	2 [.079]
QCS-FL4G-P127-19	4.1 [.161]	1.27 [.05]	5 [.197]	24 [.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



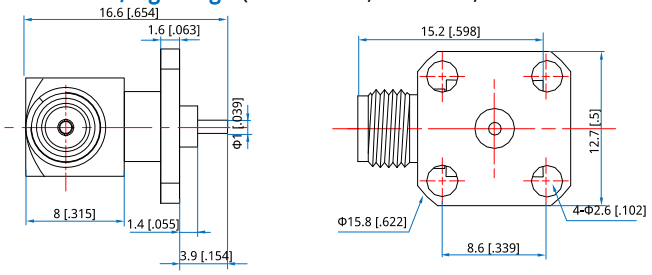
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P127-20	4.1 [.161]	1.27 [.05]	3.17 [.125]	1.57 [.062]
QCS-FL4G-P127-21	4.1 [.161]	1.27 [.05]	5 [.197]	2 [.079]
QCS-FL4G-P127-22	4.1 [.161]	1.27 [.05]	5 [.197]	24 [.945]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



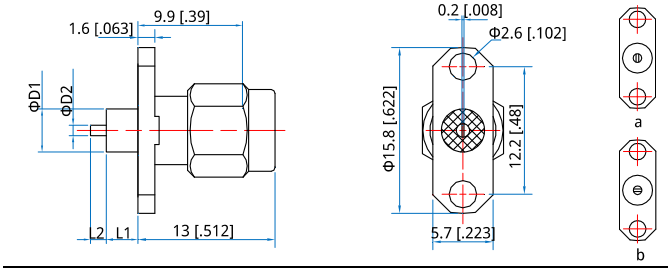
Part Number	ΦD1	ΦD2	L1	L2
QCS-FL4G-P100-23	4.1[.161]	1[.04]	4[.158]	1.5[.059]
QCS-FL4G-P100-24	4.1[.161]	1[.04]	3[.118]	1.5[.059]

SMA Female, Right Angle (DC~26.5GHz, VSWR≤1.2, Passivated stainless steel)



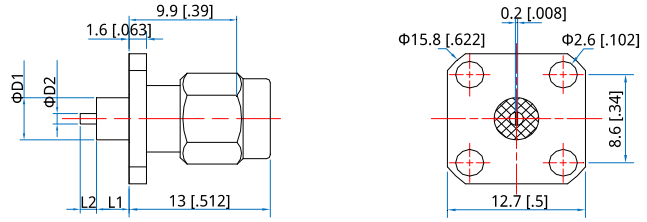
Part Number
QCS-FRL4G-P100-01

SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



Part Number	ΦD1	ΦD2	L1	L2	
QCS-ML2G-P100-01	4.1 [.161]	1 [.04]	4 [.158]	1.5 [.059]	a
QCS-ML2G-P100-02	4.1 [.161]	1 [.04]	4 [.158]	1.5 [.059]	b

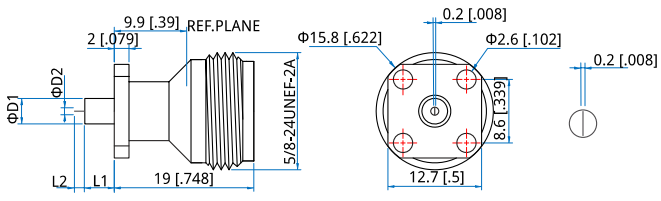
SMA Male (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)



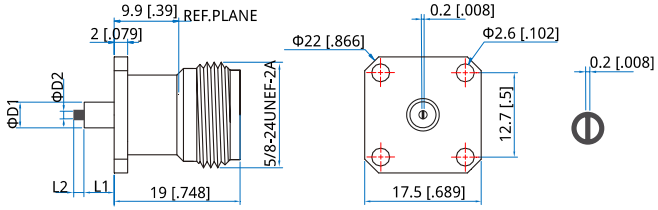
Part Number	ΦD1	ΦD2	L1	L2
QCS-ML4G-P100-01	4.1 [.161]	1 [.04]	4 [.158]	1.5 [.059]

N Series

N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

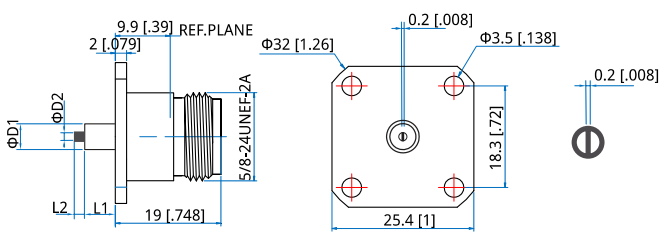


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-P127-01	4.1 [.161]	1.27 [.05]	4 [.157]	1.5 [.059]

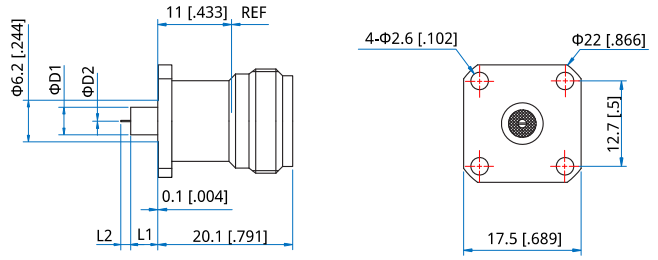


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-P127-02	4.1 [.161]	1.27 [.05]	4 [.157]	1.5 [.059]

N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

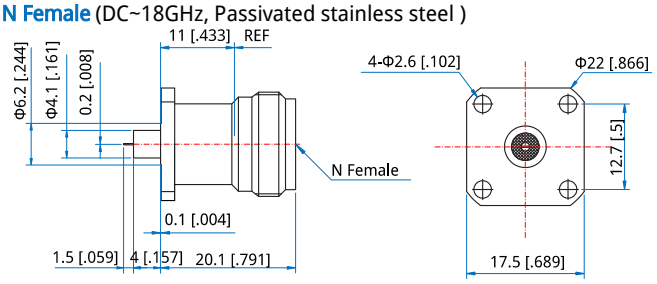


Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-P127-03	4.1 [.161]	1.27 [.05]	4 [.157]	1.5 [.059]



Part Number	ΦD1	ΦD2	L1	L2
QCN-FL4G-P20-01	4.1 [.161]	0.2 [.05]	4 [.157]	1.5 [.059]

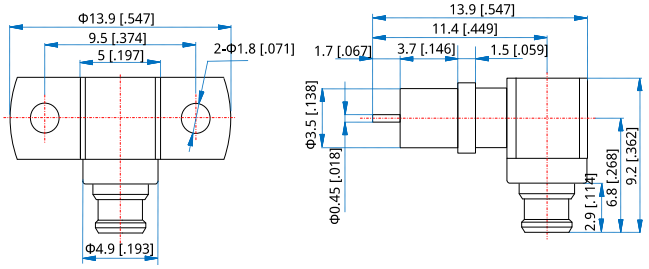
N Female (DC~18GHz, Passivated stainless steel)



Part Number
QCN-FL4G-P20-01

SMP Series

SMP Female (DC~2GHz, Gold plated brass)



Part Number

QCP-FL2B-P45-01

Straight Terminal Without Dielectric Connectors

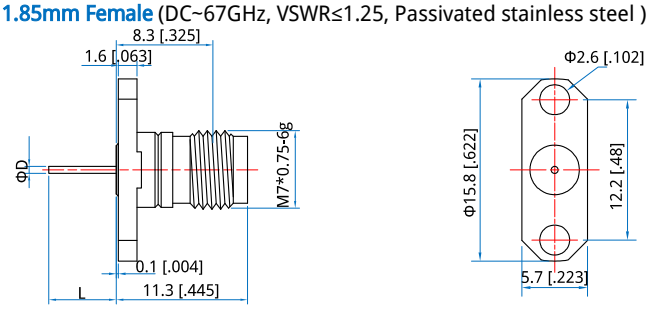
Qualwave provides various straight terminal without dielectric connectors, including 1.85mm, 2.4mm, 2.92mm, SMA, etc to meet different requirements. The frequency range covers DC~67GHz.

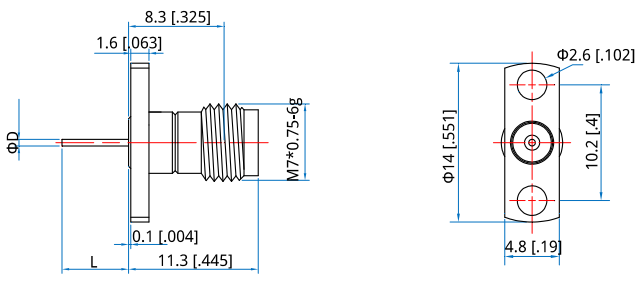
Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Flange Mount

1.85mm Series

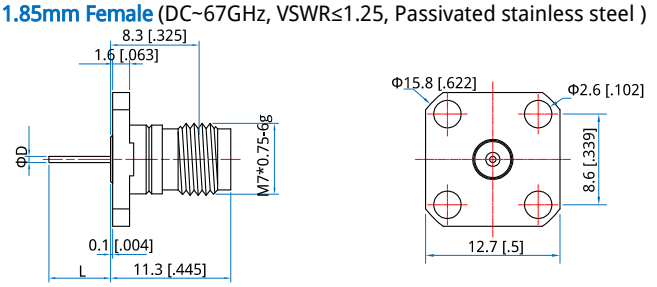
1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

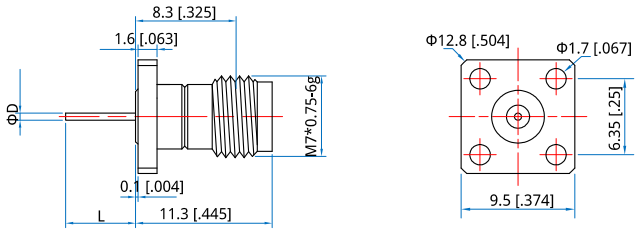




Part Number	ΦD	L	Part Number	ΦD	L
QCV-FL2G-D30-01	0.3 [.012]	1.2 [.047]	QCV-FL2G-D30-04	0.3 [.012]	1.2 [.047]
QCV-FL2G-D30-02	0.3 [.012]	2 [.079]	QCV-FL2G-D30-05	0.3 [.012]	2 [.079]
QCV-FL2G-D58-03	0.58 [.023]	5.85 [.23]	QCV-FL2G-D58-06	0.58 [.023]	5.85 [.23]

1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

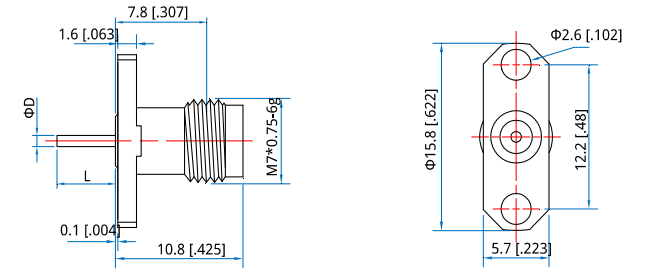


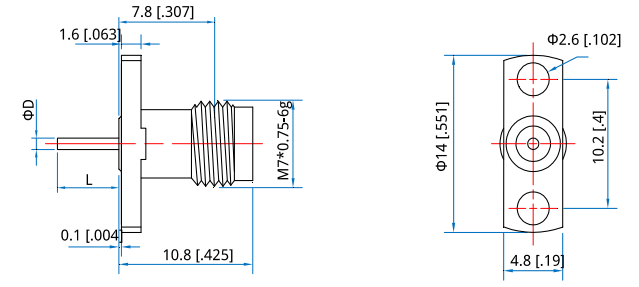


Part Number	ΦD	L	Part Number	ΦD	L
QCV-FL4G-D30-01	0.3 [.012]	1.2 [.047]	QCV-FL4G-D30-04	0.3 [.012]	1.2 [.047]
QCV-FL4G-D30-02	0.3 [.012]	2 [.079]	QCV-FL4G-D30-05	0.3 [.012]	2 [.079]
QCV-FL4G-D58-03	0.58 [.023]	5.85 [.23]	QCV-FL4G-D58-06	0.58 [.023]	5.85 [.23]

2.4mm Series

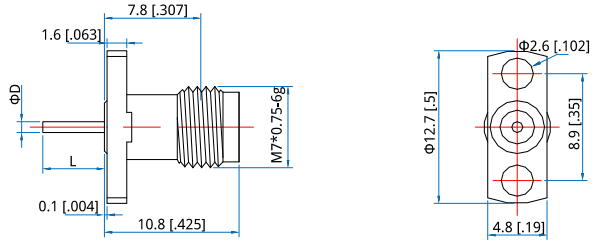
2.4mm female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)





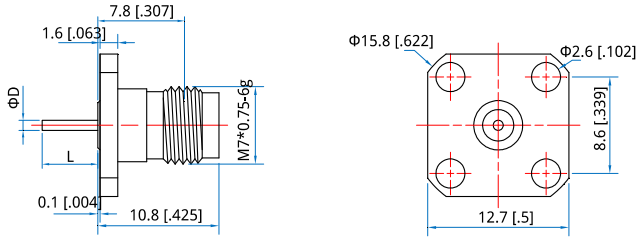
Part Number	ΦD	L	Part Number	ΦD	L
QC2-FL2G-D64-01	0.64 [.025]	10 [.394]	QC2-FL2G-D64-08	0.64 [.025]	10 [.394]
QC2-FL2G-D64-02	0.64 [.025]	6.84 [.269]	QC2-FL2G-D64-09	0.64 [.025]	6.84 [.269]
QC2-FL2G-D75-03	0.75 [.029]	9 [.354]	QC2-FL2G-D75-10	0.75 [.029]	9 [.354]
QC2-FL2G-D86-04	0.86 [.034]	8.75 [.344]	QC2-FL2G-D86-11	0.86 [.034]	8.75 [.344]
QC2-FL2G-D100-05	1 [.04]	5.5 [.216]	QC2-FL2G-D100-12	1 [.04]	5.5 [.216]
QC2-FL2G-D104-06	1.04 [.041]	6.34 [.25]	QC2-FL2G-D104-13	1.04 [.041]	6.34 [.25]
QC2-FL2G-D120-07	1.2 [.047]	3 [.118]	QC2-FL2G-D120-14	1.2 [.047]	3 [.118]

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

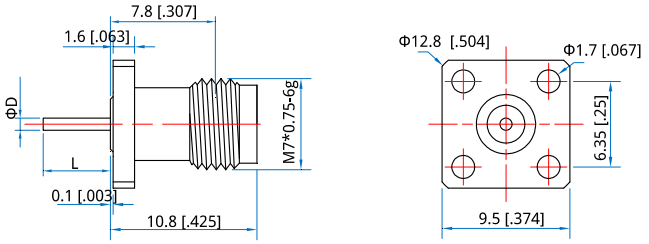


Part Number	ΦD	L
QC2-FL2G-D64-15	0.64 [.025]	10 [.394]
QC2-FL2G-D64-16	0.64 [.025]	6.84 [.269]
QC2-FL2G-D75-17	0.75 [.029]	9 [.354]
QC2-FL2G-D86-18	0.86 [.034]	8.75 [.344]
QC2-FL2G-D100-19	1 [.04]	5.5 [.216]
QC2-FL2G-D104-20	1.04 [.041]	6.34 [.25]
QC2-FL2G-D120-21	1.2 [.047]	3 [.118]

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

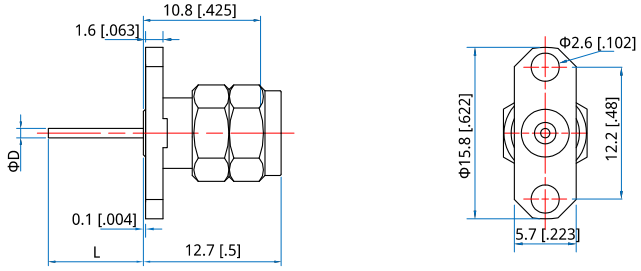


Part Number	ΦD	L
QC2-FL4G-D64-01	0.64 [.025]	10 [.394]
QC2-FL4G-D64-02	0.64 [.025]	6.84 [.269]
QC2-FL4G-D75-03	0.75 [.029]	9 [.354]
QC2-FL4G-D86-04	0.86 [.034]	8.75 [.344]
QC2-FL4G-D100-05	1 [.04]	5.5 [.216]
QC2-FL4G-D104-06	1.04 [.041]	6.34 [.25]
QC2-FL4G-D120-07	1.2 [.047]	3 [.118]

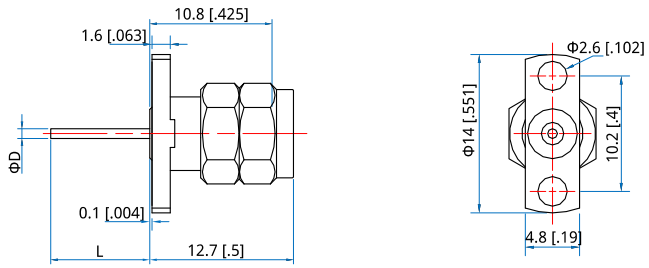


Part Number	ΦD	L
QC2-FL4G-D64-08	0.64 [.025]	10 [.394]
QC2-FL4G-D64-09	0.64 [.025]	6.84 [.269]
QC2-FL4G-D75-10	0.75 [.029]	9 [.354]
QC2-FL4G-D86-11	0.86 [.034]	8.75 [.344]
QC2-FL4G-D100-12	1 [.04]	5.5 [.216]
QC2-FL4G-D104-13	1.04 [.041]	6.34 [.25]
QC2-FL4G-D120-14	1.2 [.047]	3 [.118]

2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

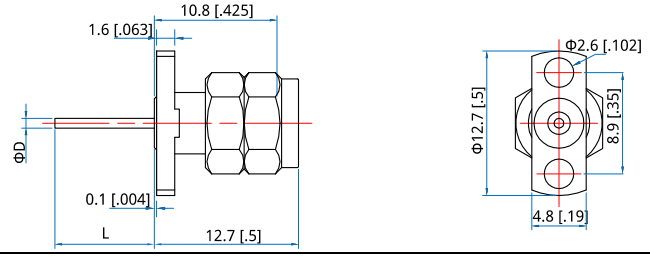


Part Number	ΦD	L
QC2-ML2G-D64-01	0.64 [.025]	10 [.394]
QC2-ML2G-D86-02	0.86 [.034]	8.75 [.344]



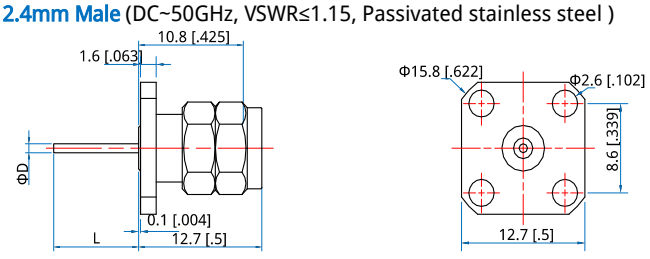
Part Number	ΦD	L
QC2-ML2G-D64-03	0.64 [.025]	10 [.394]
QC2-ML2G-D86-04	0.86 [.034]	8.75 [.344]

2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)

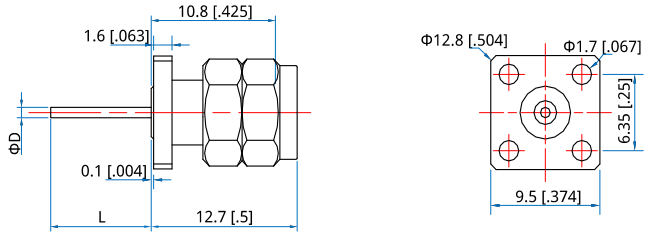


Part Number	ΦD	L
QC2-ML2G-D64-05	0.64 [.025]	10 [.394]
QC2-ML2G-D86-06	0.86 [.034]	8.75 [.344]

2.4mm Male (DC~50GHz, VSWR≤1.15, Passivated stainless steel)



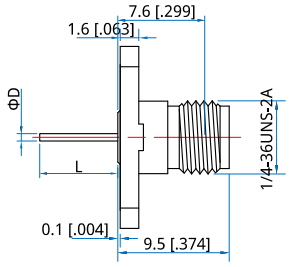
Part Number	ΦD	L
QC2-ML4G-D64-01	0.64 [.025]	10 [.394]
QC2-ML4G-D86-02	0.86 [.034]	8.75 [.344]

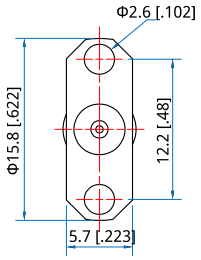


Part Number	ΦD	L
QC2-ML4G-D64-03	0.64 [.025]	10 [.394]
QC2-ML4G-D86-04	0.86 [.034]	8.75 [.344]

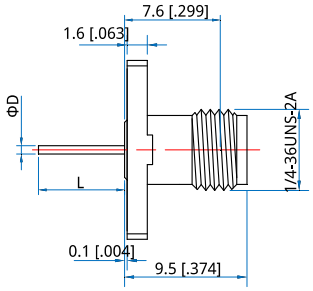
2.92mm Series

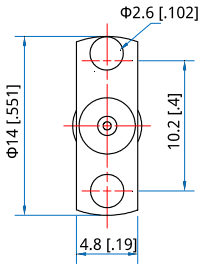
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





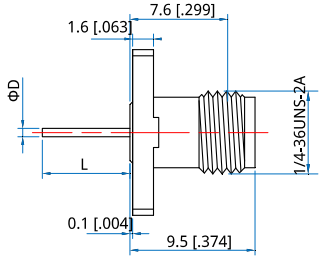
Part Number	ΦD	L
QCK-FL2G-D64-01	0.64 [.025]	10.92 [.43]
QCK-FL2G-D64-02	0.64 [.025]	6.84 [.269]
QCK-FL2G-D30-03	0.3 [.012]	7 [.276]
QCK-FL2G-D30-04	0.3 [.012]	2 [.079]
QCK-FL2G-D75-05	0.75 [.03]	30 [1.181]

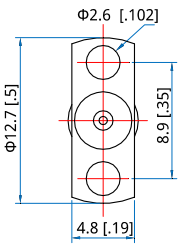




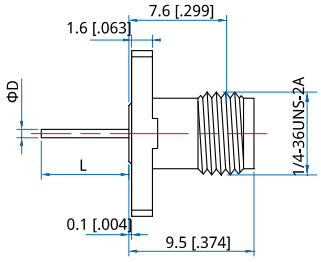
Part Number	ΦD	L
QCK-FL2G-D64-06	0.64 [.025]	10.92 [.43]
QCK-FL2G-D64-07	0.64 [.025]	6.84 [.269]
QCK-FL2G-D30-08	0.3 [.012]	7 [.276]
QCK-FL2G-D30-09	0.3 [.012]	2 [.079]
QCK-FL2G-D75-10	0.75 [.03]	30 [1.181]

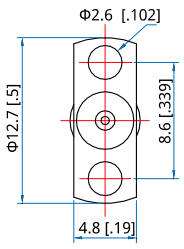
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





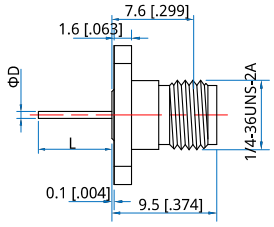
Part Number	ΦD	L
QCK-FL2G-D64-11	0.64 [.025]	10.92 [.43]
QCK-FL2G-D64-12	0.64 [.025]	6.84 [.269]
QCK-FL2G-D30-13	0.3 [.012]	7 [.276]
QCK-FL2G-D30-14	0.3 [.012]	2 [.079]
QCK-FL2G-D75-15	0.75 [.03]	30 [1.181]

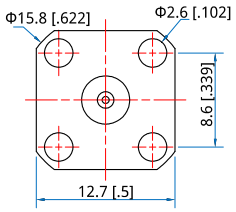




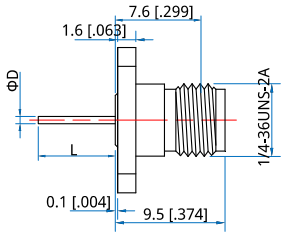
Part Number	ΦD	L
QCK-FL2G-D64-16	0.64 [.025]	10.92 [.43]
QCK-FL2G-D64-17	0.64 [.025]	6.84 [.269]
QCK-FL2G-D30-18	0.3 [.012]	7 [.276]
QCK-FL2G-D30-19	0.3 [.012]	2 [.079]
QCK-FL2G-D75-20	0.75 [.03]	30 [1.181]

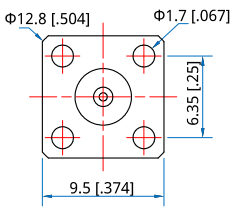
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





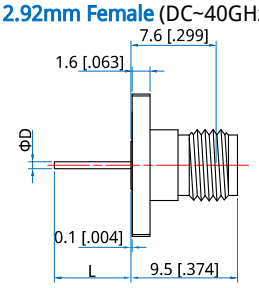
Part Number	ΦD	L
QCK-FL4G-D64-01	0.64 [.025]	10.92 [.43]
QCK-FL4G-D64-02	0.64 [.025]	6.84 [.269]
QCK-FL4G-D30-03	0.3 [.012]	7 [.276]
QCK-FL4G-D30-04	0.3 [.012]	2 [.079]
QCK-FL4G-D75-05	0.75 [.03]	30 [1.181]

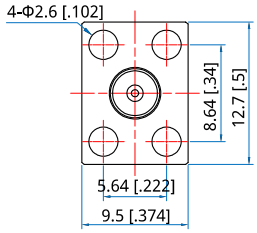




Part Number	ΦD	L
QCK-FL4G-D64-06	0.64 [.025]	10.92 [.43]
QCK-FL4G-D64-07	0.64 [.025]	6.84 [.269]
QCK-FL4G-D30-08	0.3 [.012]	7 [.276]
QCK-FL4G-D30-09	0.3 [.012]	2 [.079]
QCK-FL4G-D75-10	0.75 [.03]	30 [1.181]

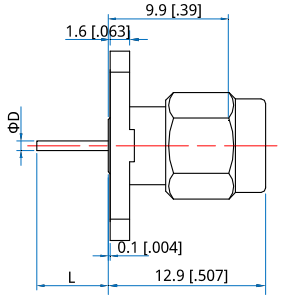
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

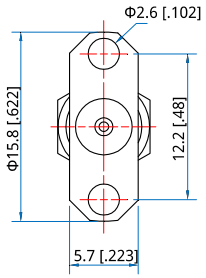




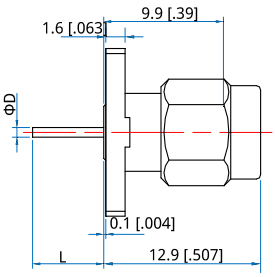
Part Number	ΦD	L
QCK-FL4G-D64-11	0.64 [.025]	10.92 [.43]
QCK-FL4G-D64-12	0.64 [.025]	6.84 [.269]
QCK-FL4G-D30-13	0.3 [.012]	7 [.276]
QCK-FL4G-D30-14	0.3 [.012]	2 [.079]
QCK-FL4G-D75-15	0.75 [.03]	30 [1.181]

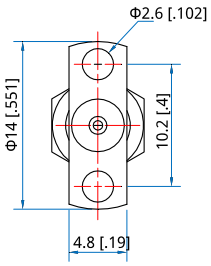
2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





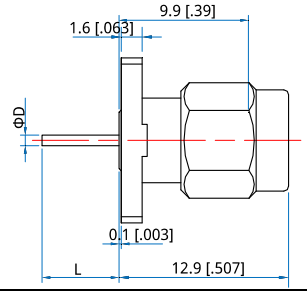
Part Number	ΦD	L
QCK-ML2G-D64-01	0.64 [.025]	10.92 [.43]
QCK-ML2G-D64-02	0.64 [.025]	6.84 [.269]

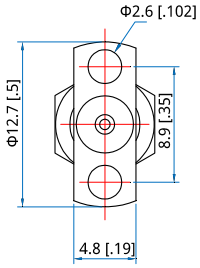




Part Number	ΦD	L
QCK-ML2G-D64-03	0.64 [.025]	10.92 [.43]
QCK-ML2G-D64-04	0.64 [.025]	6.84 [.269]

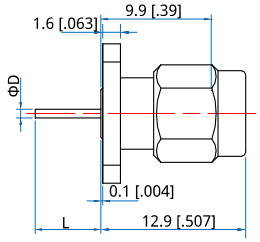
2.92mm Female (DC~40GHz, VSWR≤1.15, Passivated stainless steel)

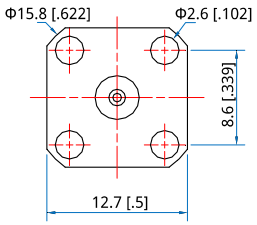




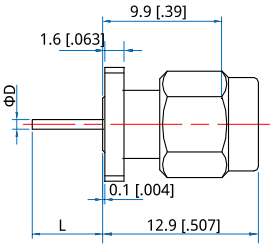
Part Number	ΦD	L
QCK-ML2G-D64-05	0.64 [.025]	10.92 [.43]
QCK-ML2G-D64-06	0.64 [.025]	6.84 [.269]

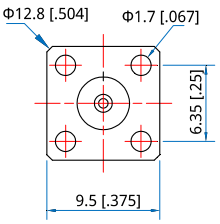
2.92mm Male (DC~40GHz, VSWR≤1.15, Passivated stainless steel)





Part Number	ΦD	L
QCK-ML4G-D64-01	0.64 [.025]	10.92 [.43]
QCK-ML4G-D64-02	0.64 [.025]	6.84 [.269]

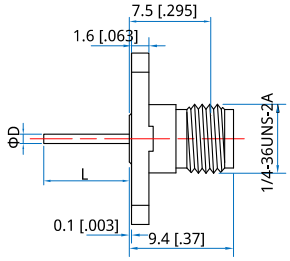


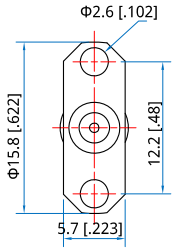


Part Number	ΦD	L
QCK-ML4G-D64-03	0.64 [.025]	10.92 [.43]
QCK-ML4G-D64-04	0.64 [.025]	6.84 [.269]

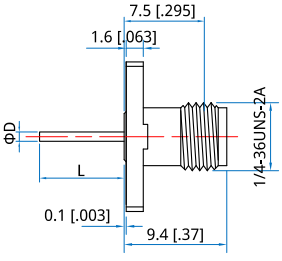
SMA Series

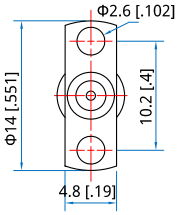
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





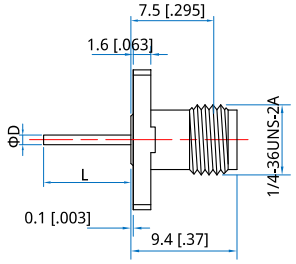
Part Number	ΦD	L
QCS-FL2G-D64-01	0.64 [.025]	18 [.71]
QCS-FL2G-D87-02	0.87 [.034]	26 [1.024]
QCS-FL2G-D87-03	0.87 [.034]	10.92 [.43]

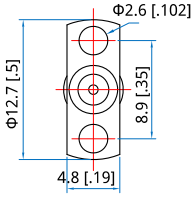




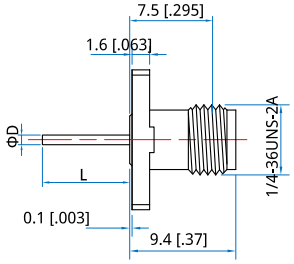
Part Number	ΦD	L
QCS-FL2G-D64-04	0.64 [.025]	18 [.71]
QCS-FL2G-D87-05	0.87 [.034]	26 [1.024]
QCS-FL2G-D87-06	0.87 [.034]	10.92 [.43]

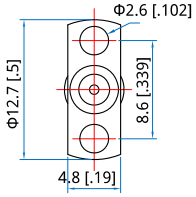
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





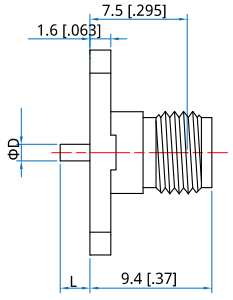
Part Number	ΦD	L
QCS-FL2G-D64-07	0.64 [.025]	18 [.71]
QCS-FL2G-D87-08	0.87 [.034]	26 [1.024]
QCS-FL2G-D87-09	0.87 [.034]	10.92 [.43]

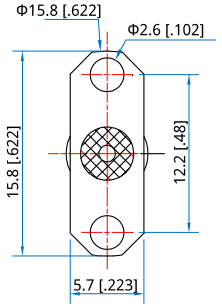




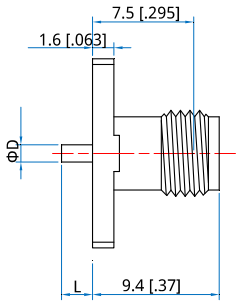
Part Number	ΦD	L
QCS-FL2G-D64-10	0.64 [.025]	18 [.71]
QCS-FL2G-D87-11	0.87 [.034]	26 [1.024]
QCS-FL2G-D87-12	0.87 [.034]	10.92 [.43]

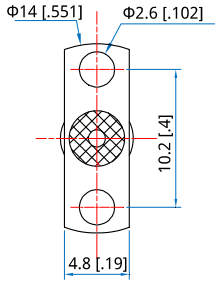
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





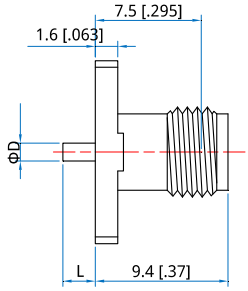
Part Number	ΦD	L
QCS-FL2G-D127-13	1.27 [.05]	2.3 [.09]

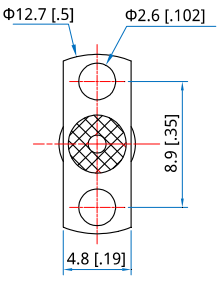




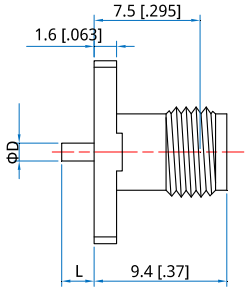
Part Number	ΦD	L
QCS-FL2G-D127-14	1.27 [.05]	2.3 [.09]

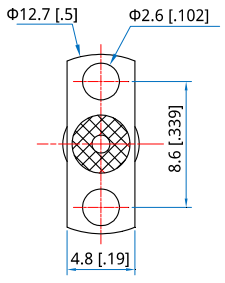
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





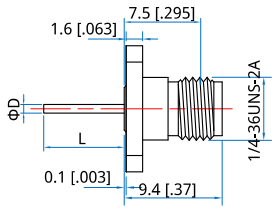
Part Number	ΦD	L
QCS-FL2G-D127-15	1.27 [.05]	2.3 [.09]

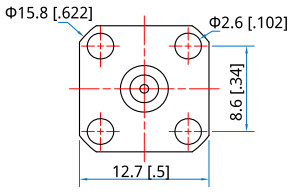




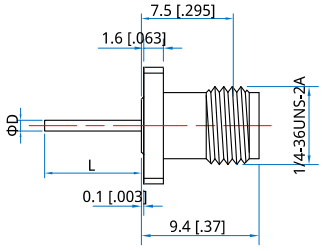
Part Number	ΦD	L
QCS-FL2G-D127-16	1.27 [.05]	2.3 [.09]

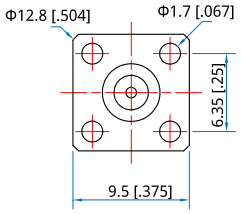
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





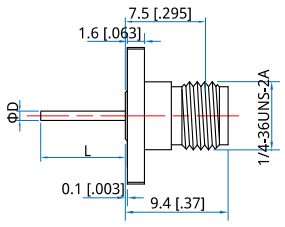
Part Number	ΦD	L
QCS-FL4G-D64-01	0.64 [.025]	18 [.71]
QCS-FL4G-D87-02	0.87 [.034]	26 [1.024]
QCS-FL4G-D87-03	0.87 [.034]	10.92 [.43]

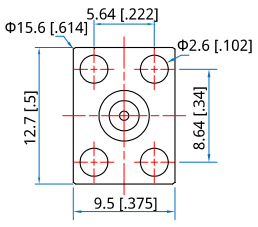




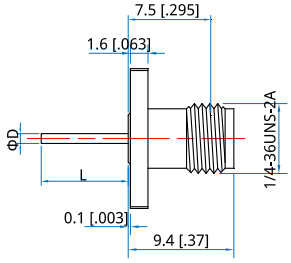
Part Number	ΦD	L
QCS-FL4G-D64-04	0.64 [.025]	18 [.71]
QCS-FL4G-D87-05	0.87 [.034]	26 [1.024]
QCS-FL4G-D87-06	0.87 [.034]	10.92 [.43]

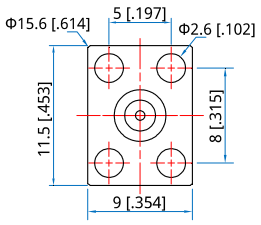
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





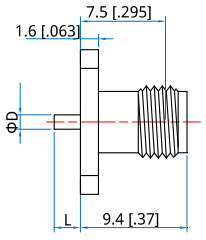
Part Number	ΦD	L
QCS-FL4G-D64-07	0.64 [.025]	18 [.71]
QCS-FL4G-D87-08	0.87 [.034]	26 [1.024]
QCS-FL4G-D87-09	0.87 [.034]	10.92 [.43]

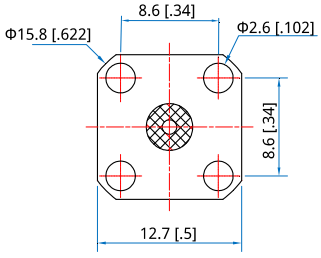




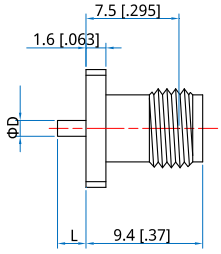
Part Number	ΦD	L
QCS-FL4G-D64-10	0.64 [.025]	18 [.71]
QCS-FL4G-D87-11	0.87 [.034]	26 [1.024]
QCS-FL4G-D87-12	0.87 [.034]	10.92 [.43]

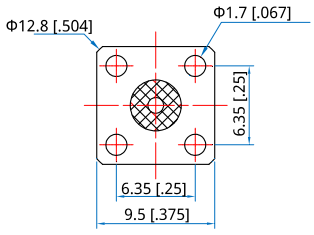
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





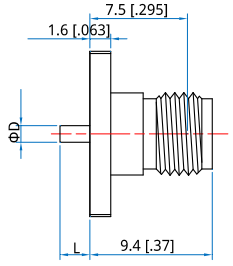
Part Number	ΦD	L
QCS-FL4G-D127-13	1.27 [.05]	2.3 [.09]

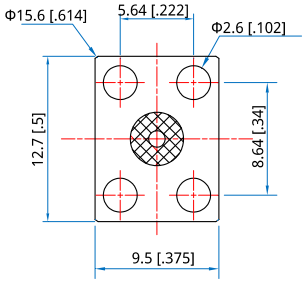




Part Number	ΦD	L
QCS-FL4G-D127-14	1.27 [.05]	2.3 [.09]

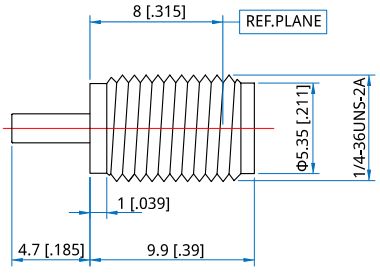
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

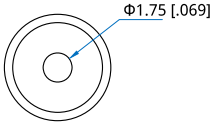




Part Number	ΦD	L
QCS-FL4G-D127-15	1.27 [.05]	2.3 [.09]

SMA Female (DC~27GHz, Passivated stainless steel)



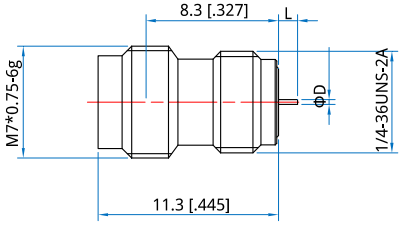


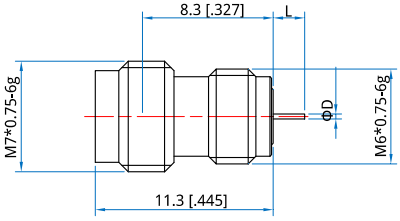
Part Number
QCS-FG-D175-01

Threaded Connection

1.85mm Series

1.85mm Female (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

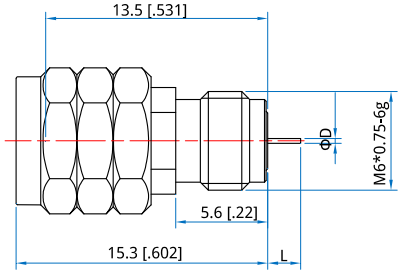




Part Number	ΦD	L
QCV-FYG-D30-01	0.3 [.012]	1.2 [.047]
QCV-FYG-D30-02	0.3 [.012]	2 [.079]

Part Number	ΦD	L
QCV-FYG-D30-03	0.3 [.012]	1.2 [.047]
QCV-FYG-D30-04	0.3 [.012]	2 [.079]

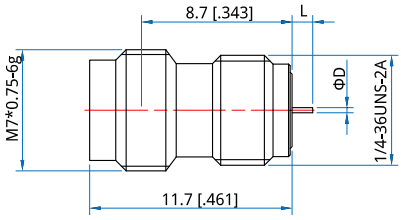
1.85mm Male (DC~67GHz, VSWR≤1.25, Passivated stainless steel)

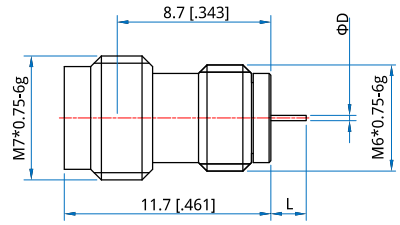


Part Number	ΦD	L
QCV-MYG-D30-01	0.3 [.012]	2 [.079]

2.4mm Series

2.4mm Female (DC~50GHz, VSWR≤1.15, Passivated stainless steel)



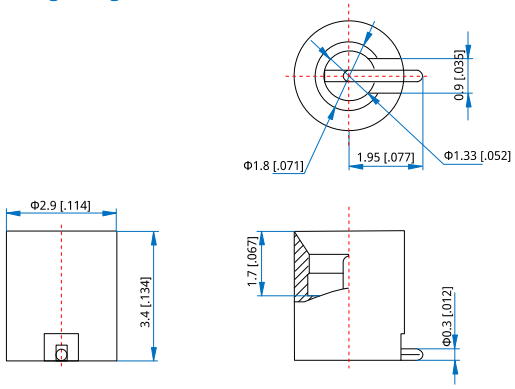


Part Number	ΦD	L
QC2-FYG-D30-01	0.3 [.012]	1.2 [.047]
QC2-FYG-D30-02	0.3 [.012]	2 [.079]

Part Number	ΦD	L
QC2-FYG-D30-03	0.3 [.012]	1.2 [.047]
QC2-FYG-D30-04	0.3 [.012]	2 [.079]

SMP Series

SMP Male, Right Angle, Smooth Bore (DC~30GHz, VSWR≤1.6, Gold plated brass)



Part Number
QCPS-MRB-D30-01

Tab Terminal Connectors

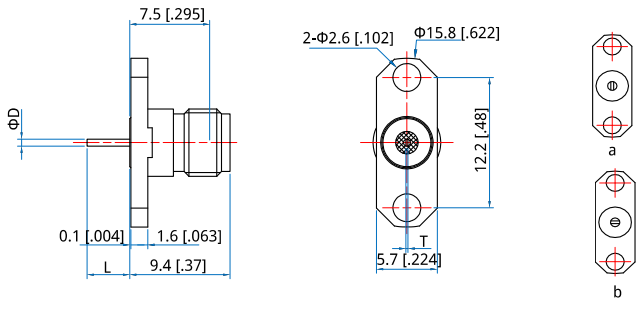
Qualwave provides various tab terminal connectors, including SMA, N, TNC etc to meet different requirements. The frequency range covers DC~26.5GHz.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

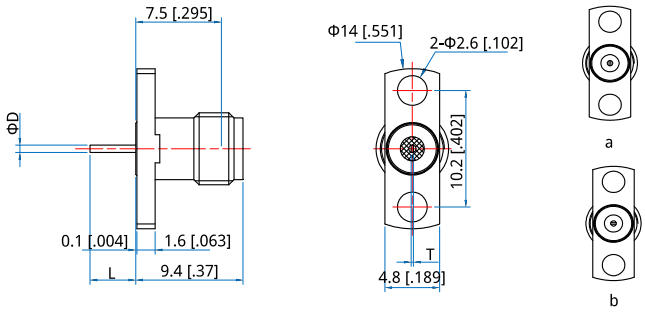
Flange Mount

SMA Series

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

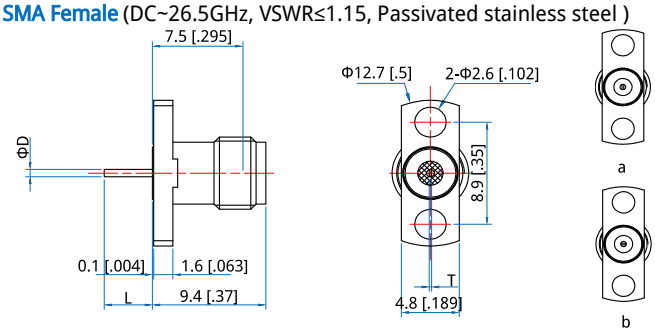


Part Number	ΦD	L	T	
QCS-FL2G-T64-01	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL2G-T64-02	0.64 [.025]	4 [.158]	0.2 [.008]	b

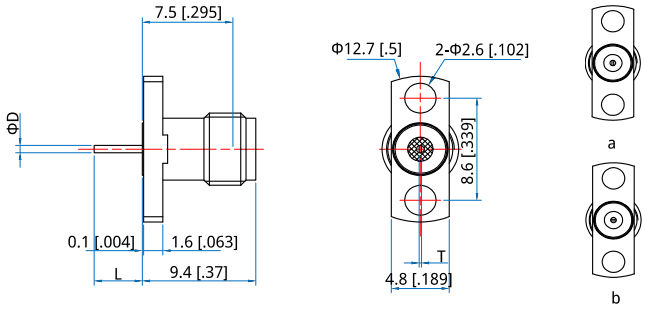


Part Number	ΦD	L	T	
QCS-FL2G-T64-03	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL2G-T64-04	0.64 [.025]	4 [.158]	0.2 [.008]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

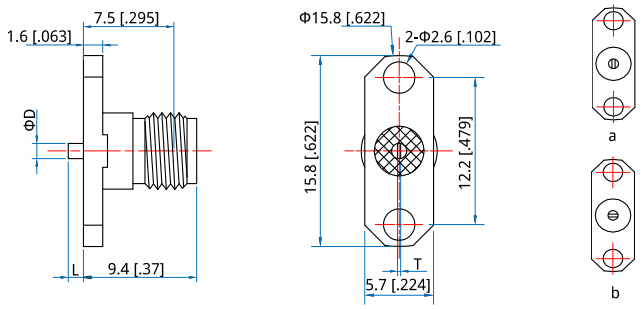


Part Number	ΦD	L	T	
QCS-FL2G-T64-05	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL2G-T64-06	0.64 [.025]	4 [.158]	0.2 [.008]	b

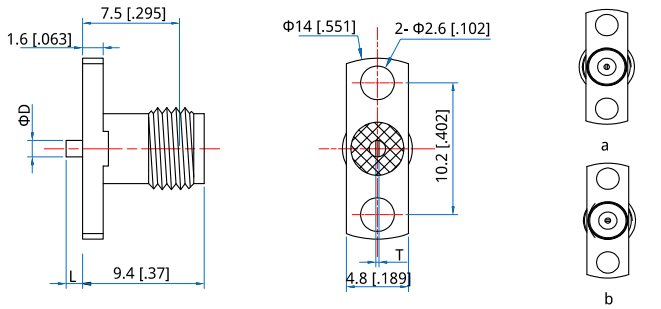


Part Number	ΦD	L	T	
QCS-FL2G-T64-07	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL2G-T64-08	0.64 [.025]	4 [.158]	0.2 [.008]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

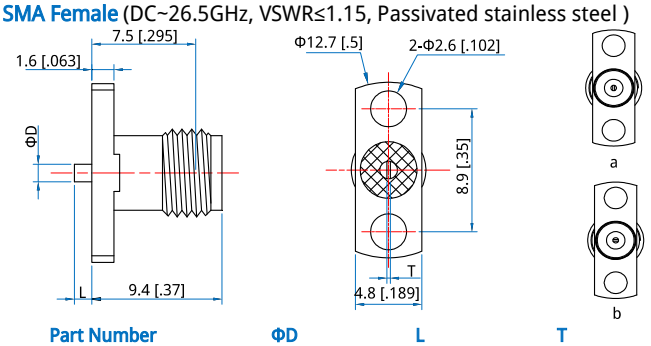


Part Number	ΦD	L	T	
QCS-FL2G-T127-09	1.27 [.05]	1.27 [.05]	0.15 [.006]	a
QCS-FL2G-T127-10	1.27 [.05]	1.27 [.05]	0.15 [.006]	b

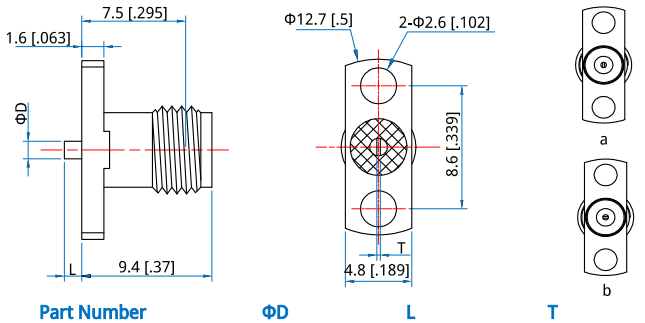


Part Number	ΦD	L	T	
QCS-FL2G-T127-11	1.27 [.05]	1.27 [.05]	0.15 [.006]	a
QCS-FL2G-T127-12	1.27 [.05]	1.27 [.05]	0.15 [.006]	b

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

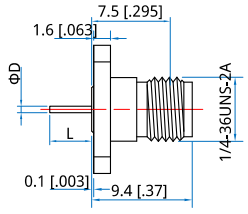


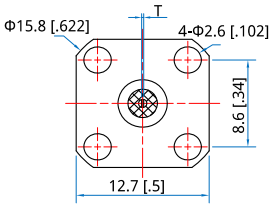
Part Number	ΦD	L	T	
QCS-FL2G-T127-13	1.27 [.05]	1.27 [.05]	0.15 [.006]	a
QCS-FL2G-T127-14	1.27 [.05]	1.27 [.05]	0.15 [.006]	b



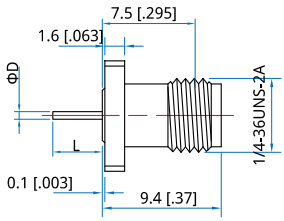
Part Number	ΦD	L	T	
QCS-FL2G-T127-15	1.27 [.05]	1.27 [.05]	0.15 [.006]	a
QCS-FL2G-T127-16	1.27 [.05]	1.27 [.05]	0.15 [.006]	b

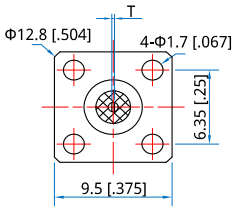
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





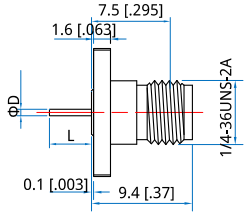
Part Number	ΦD	L	T
QCS-FL4G-T64-01	0.64 [.025]	4 [.158]	0.2 [.008]

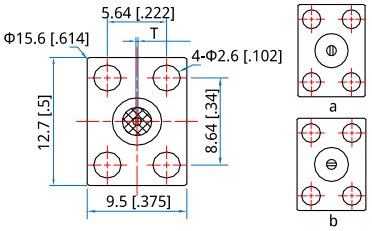




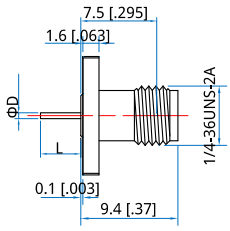
Part Number	ΦD	L	T
QCS-FL4G-T64-02	0.64 [.025]	4 [.158]	0.2 [.008]

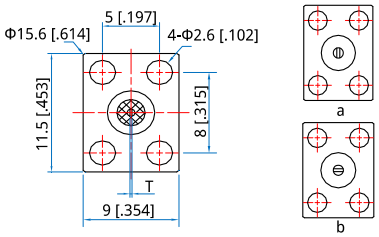
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





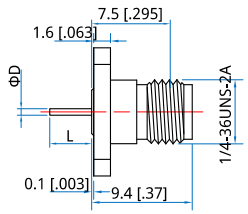
Part Number	ΦD	L	T	
QCS-FL4G-T64-03	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL4G-T64-04	0.64 [.025]	4 [.158]	0.2 [.008]	b

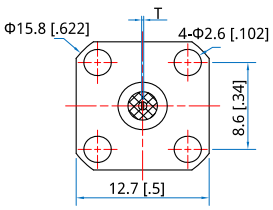




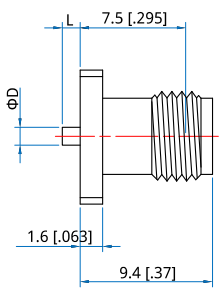
Part Number	ΦD	L	T	
QCS-FL4G-T64-05	0.64 [.025]	4 [.158]	0.2 [.008]	a
QCS-FL4G-T64-06	0.64 [.025]	4 [.158]	0.2 [.008]	b

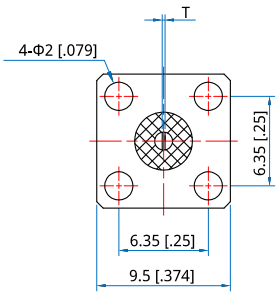
SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)





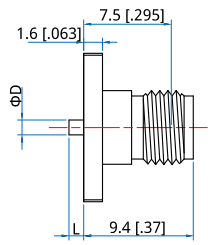
Part Number	ΦD	L	T
QCS-FL4G-T127-07	1.27 [.05]	1.27 [.05]	0.15 [.006]

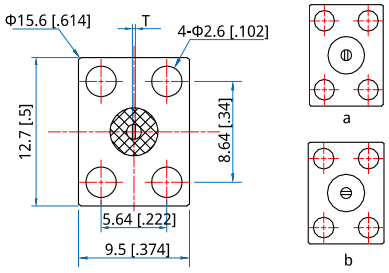




Part Number	ΦD	L	T
QCS-FL4G-T127-08	1.27 [.05]	1.27 [.05]	0.15 [.006]

SMA Female (DC~26.5GHz, VSWR≤1.15, Passivated stainless steel)

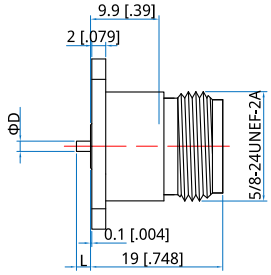


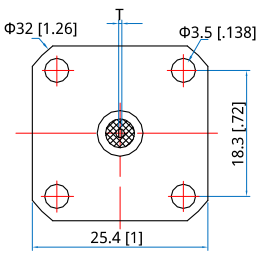


Part Number	ΦD	L	T	
QCS-FL4G-T127-09	1.27 [.05]	1.27 [.05]	0.15 [.006]	a
QCS-FL4G-T127-10	1.27 [.05]	1.27 [.05]	0.15 [.006]	b

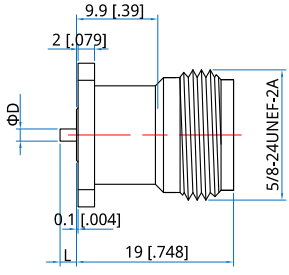
N Series

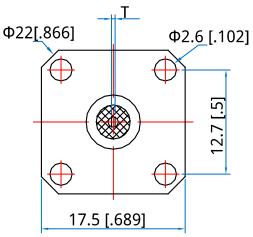
N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





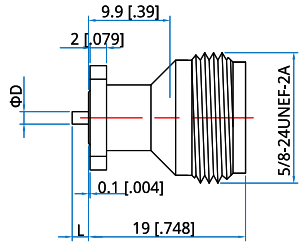
Part Number	ΦD	L	T
QCN-FL4G-T150-01	1.5 [.059]	2 [.079]	0.2 [.008]

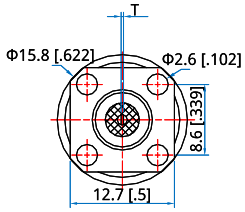




Part Number	ΦD	L	T
QCN-FL4G-T150-02	1.5 [.059]	2 [.079]	0.2 [.008]

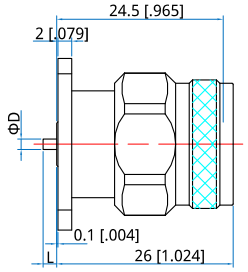
N Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)

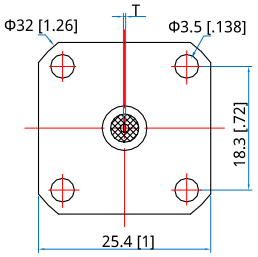




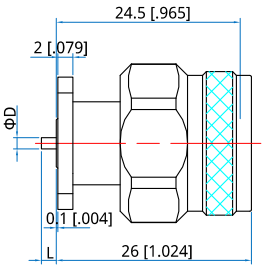
Part Number	ΦD	L	T
QCN-FL4G-T150-03	1.5 [.059]	2 [.079]	0.2 [.008]

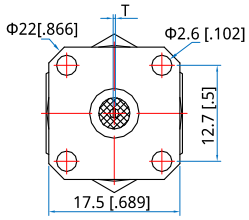
N Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





Part Number	ΦD	L	T
QCN-ML4G-T150-01	1.5 [.059]	2 [.079]	0.2 [.008]

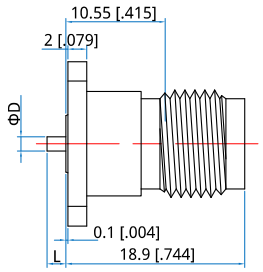


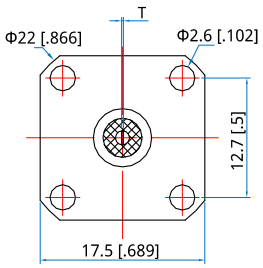


Part Number	ΦD	L	T
QCN-ML4G-T150-02	1.5 [.059]	2 [.079]	0.2 [.008]

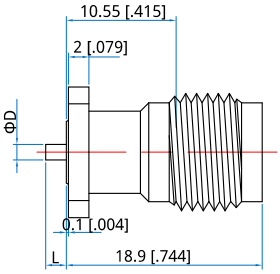
TNC Series

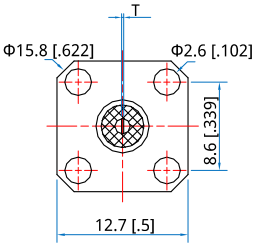
TNC Female (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





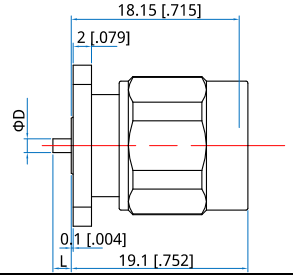
Part Number	ΦD	L	T
QCT-FL4G-T150-01	1.5 [.059]	2 [.079]	0.2 [.008]

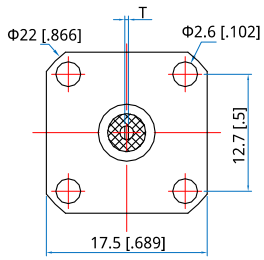




Part Number	ΦD	L	T
QCT-FL4G-T150-02	1.5 [.059]	2 [.079]	0.2 [.008]

TNC Male (DC~18GHz, VSWR≤1.15, Passivated stainless steel)





Part Number	ΦD	L	T
QCT-FL4G-T150-01	1.5 [.059]	2 [.079]	0.2 [.008]

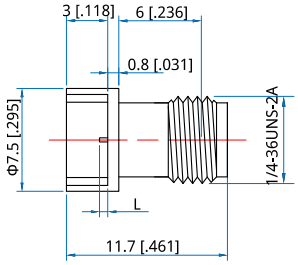
Printed Circuit Board Mount Connectors

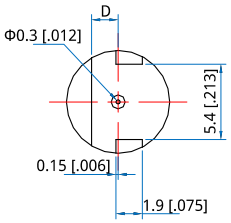
Qualwave provides various printed circuit board mount connectors, including 2.92mm, SMA, etc to meet different requirements. The frequency range covers DC~40GHz.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

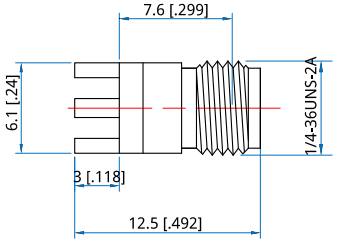
2.92mm Series

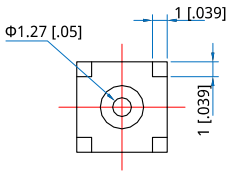
2.92mm Female (DC~40GHz, VSWR≤1.15, Gold plated brass)





Part Number	D	L	Plate Thickness
QCK-FB-B30-02	1.93 [.076]	0.6 [.023]	1.78 [.07]
QCK-FB-B30-03	0.76 [.03]	0.6 [.023]	0.61 [.024]
QCK-FB-B30-04	1.02 [.04]	0.6 [.023]	0.87 [.034]
QCK-FB-B30-05	2.45 [.096]	0.6 [.023]	2.3 [.091]

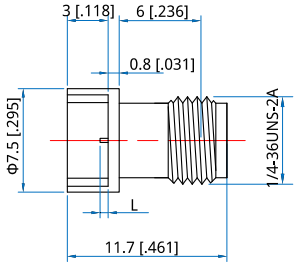


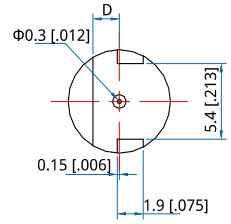


Part Number
QCK-FB-B127-01

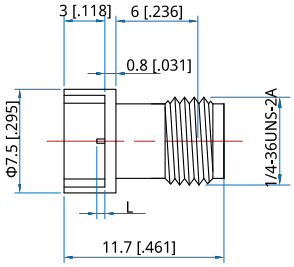
SMA Series

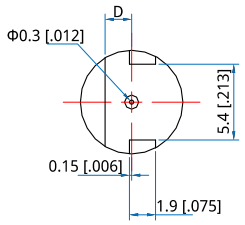
SMA Female (DC~26.5GHz, VSWR≤1.15, Gold plated brass)





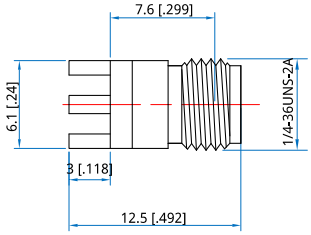
Part Number	D	L	Plate Thickness
QCS-FB-B30-01	1.93 [.076]	0.6 [.023]	1.78 [.07]
QCS-FB-B30-02	0.76 [.03]	0.6 [.023]	0.61 [.024]
QCS-FB-B30-03	1.02 [.04]	0.6 [.023]	0.87 [.034]
QCS-FB-B30-04	2.45 [.096]	0.6 [.023]	2.3 [.091]

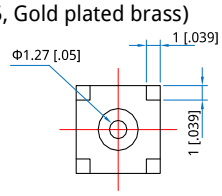




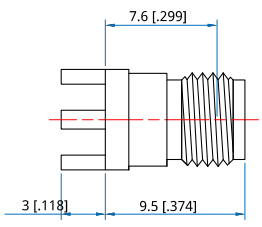
Part Number	D	L	Plate Thickness
QCS-FB-B30-05	1.93 [.076]	1.22 [.048]	1.78 [.07]
QCS-FB-B30-06	0.76 [.03]	1.22 [.048]	0.61 [.024]
QCS-FB-B30-07	1.02 [.04]	1.22 [.048]	0.87 [.034]
QCS-FB-B30-08	2.45 [.096]	1.22 [.048]	2.3 [.091]

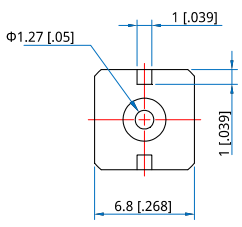
SMA Female (DC~26.5GHz, VSWR≤1.15, Gold plated brass)





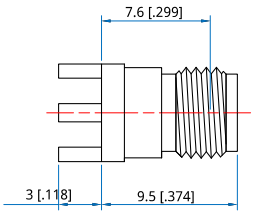
Part Number
QCS-FB-B127-01

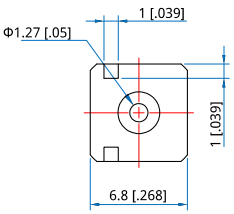




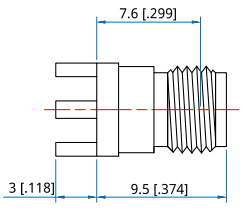
Part Number
QCS-FB-B127-02

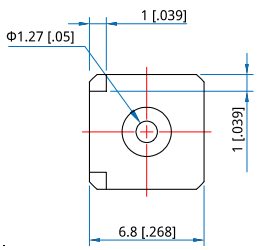
SMA Female (DC~26.5GHz, VSWR≤1.15, Gold plated brass)





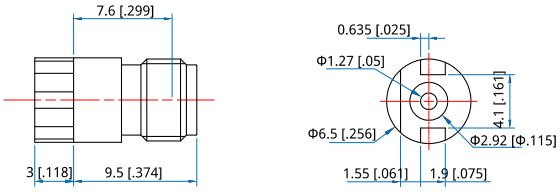
Part Number
QCS-FB-B127-03





Part Number
QCS-FB-B127-04

SMA Female (DC~26.5GHz, VSWR≤1.15, Gold plated brass)

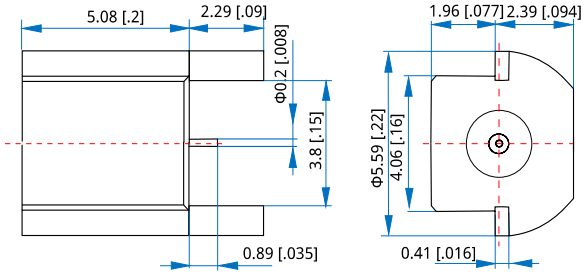


Part Number

QCS-FB-B127-05

SMP Series

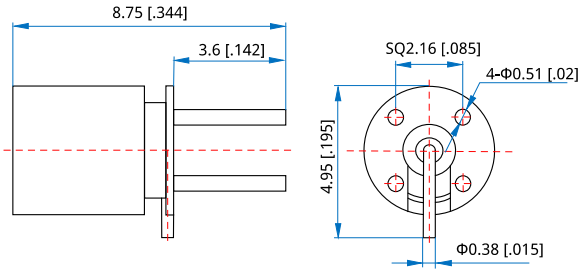
SMP Male Limited Detent (DC~40GHz, Gold plated brass)



Part Number

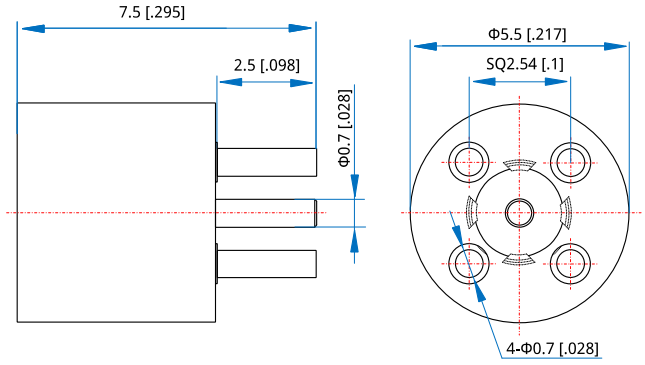
QCPL-MB-B20-01

SMP Male Full Detent (DC~18GHz, Gold plated brass)



Part Number

QCPF-MB-B38-01



Part Number

QCPF-MB-B70-02

Cable Connectors

Qualwave provides various cable connectors to meet different requirements.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Cable connector with Part No. stated NA in the following table is not sold separately but is available only in the form of cable assemblies.

Matching Cable	Code	Part Number	Connector	FREQ. (GHz)	VSWR (max.)	Material
QTV-V	VF	NA	1.85mm female	DC~67	1.5	Passivated stainless steel
QTV-V	MV	NA	NMD 1.85mm male	DC~67	1.5	Passivated stainless steel
QTV-V	MVF	NA	NMD 1.85mm female	DC~67	1.5	Passivated stainless steel
QTV-2	2F	NA	2.4mm female	DC~50	1.42	Passivated stainless steel
QTV-2	M2	NA	NMD 2.4mm male	DC~50	1.42	Passivated stainless steel
QTV-2	M2F	NA	NMD 2.4mm female	DC~50	1.42	Passivated stainless steel
QTV-K	KF	NA	2.92mm female	DC~40	1.35	Passivated stainless steel
QTV-K	MK	NA	NMD 2.92mm male	DC~40	1.35	Passivated stainless steel
QTV-K	MKF	NA	NMD 2.92mm female	DC~40	1.35	Passivated stainless steel
QTV-3	3F	NA	3.5mm female	DC~26.5	1.3	Passivated stainless steel
QTV-3	M3	NA	NMD 3.5mm male	DC~26.5	1.3	Passivated stainless steel
QTV-3	M3F	NA	NMD 3.5mm female	DC~26.5	1.3	Passivated stainless steel
QTV-N	NF	NA	N female	DC~18	1.3	Passivated stainless steel
QTV-N	MN	NA	NMD N male	DC~18	1.3	Passivated stainless steel
QTV-N	MNF	NA	NMD N female	DC~18	1.3	Passivated stainless steel
QT110	1	NA	1.0mm male	DC~110	1.5	Passivated stainless steel
QT110	1F	NA	1.0mm female	DC~110	1.5	Passivated stainless steel
QT110P	1	NA	1.0mm male	DC~110	1.5	Passivated stainless steel
QT110P	1F	NA	1.0mm female	DC~110	1.5	Passivated stainless steel
QT67	V	QCV-MG-T67-3	1.85mm male	DC~67	1.3	Passivated stainless steel
QT67	VF	QCV-FG-T67-2	1.85mm female	DC~67	1.3	Passivated stainless steel
QT67P	V	QCV-MG-T67P-4	1.85mm male	DC~67	1.3	Passivated stainless steel
QT67P	VF	QCV-FG-T67P-2	1.85mm female	DC~67	1.35	Passivated stainless steel
QT50	2	QC2-MG-T50-2	2.4mm male	DC~50	1.3	Passivated stainless steel
QT50	2R	QC2-MRG-T50-1	2.4mm male right angle	DC~50	1.35	Passivated stainless steel
QT50	2F	QC2-FG-T50-1	2.4mm female	DC~50	1.3	Passivated stainless steel
QT50	2FR	QC2-FRG-T50-1	2.4mm female right angle	DC~50	1.4	Passivated stainless steel
QT50P	2FL2	QC2-FL2G-T50P-1	2.4mm female 2-Hole flange mount	DC~50	1.35	Passivated stainless steel
QT50	K	QCK-MG-T50-1	2.92mm male	DC~40	1.25	Passivated stainless steel
QT50	KR	QCK-MRG-T50-1	2.92mm male right angle	DC~40	1.25	Passivated stainless steel
QT50	KF	QCK-FG-T50-1	2.92mm female	DC~40	1.25	Passivated stainless steel
QT50	KFR	QCK-FRG-T50-1	2.92mm female right angle	DC~40	1.25	Passivated stainless steel
QT50	3	QC3-MG-T50-1	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QT50	3F	QC3-FG-T50-1	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QT50	S	QCS-MG-T50-1	SMA male	DC~26.5	1.3	Passivated stainless steel
QT50	SF	QCS-FG-T50-1	SMA female	DC~26.5	1.3	Passivated stainless steel
QT50	N	QCN-MG-T50-4	N male	DC~18	1.25	Passivated stainless steel
QT50	NF	QCN-FG-T50-1	N female	DC~18	1.4	Passivated stainless steel
QT50	NFL4	QCN-FL4B-T50-1	N female 4-Hole flange mount	DC~18	1.3	Ternary alloy plated brass
QT50P	2	QC2-MG-T50P-4	2.4mm male	DC~50	1.3	Passivated stainless steel
QT50P	2R	QC2-MRG-T50P-1	2.4mm male right angle	DC~50	1.35	Passivated stainless steel
QT50P	2F	QC2-FG-T50P-4	2.4mm female	DC~50	1.3	Passivated stainless steel
QT50P	2FR	QC2-FRG-T50P-1	2.4mm female right angle	DC~50	1.4	Passivated stainless steel
QT50P	K	QCK-MG-T50P-4	2.92mm male	DC~40	1.25	Passivated stainless steel
QT50P	KR	QCK-MRG-T50P-1	2.92mm male right angle	DC~40	1.25	Passivated stainless steel
QT50P	KF	QCK-FG-T50P-3	2.92mm female	DC~40	1.3	Passivated stainless steel
QT50P	KFR	QCK-FRG-T50P-1	2.92mm female right angle	DC~40	1.25	Passivated stainless steel
QT50P	3	QC3-MG-T50P-1	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QT50P	3F	QC3-FG-T50P-1	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QT50P	S	QCS-MG-T50P-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QT50P	SF	QCS-FG-T50P-1	SMA female	DC~26.5	1.25	Passivated stainless steel
QT50P	N	QCN-MG-T50P-3	N male	DC~18	1.25	Passivated stainless steel
QT50P	NF	QCN-FG-T50P-1	N female	DC~18	1.25	Passivated stainless steel
QTE	S	QCS-MG-141-3	SMA male	DC~18	1.25	Passivated stainless steel
QTE	SF	QCS-FB-141-1	SMA female	DC~18	1.25	Gold plated brass
QTE	N	QCN-MB-141-3	N male	DC~18	1.25	Nickel plated brass
QTE	NF	QCN-FB-141-1	N female	DC~18	1.25	Nickel plated brass
QTF	S	QCS-MG-Z500W-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QTF	SF	QCS-FG-Z500W-1	SMA female	DC~26.5	1.3	Passivated stainless steel
QTF	N	QCN-MG-Z500W-1	N male	DC~18	1.25	Passivated stainless steel
QA220	V	QCV-MG-A220-2	1.85mm male	DC~67	1.3	Passivated stainless steel

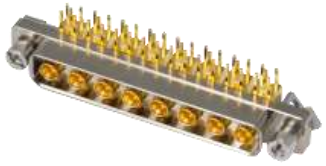
Matching Cable	Code	Part Number	Connector	FREQ. (GHz)	VSWR (max.)	Material
QA220	VF	QCV-FG-A220-1	1.85mm female	DC~67	1.3	Passivated stainless steel
QA220	GF	QCG-FB-A220-1	SSMP female	DC~67	1.5	Beryllium copper
QA220	GF	QCG-FB-086-1	SSMP female	DC~40	1.4	Beryllium copper
QA220	GFR	QCG-FRB-086-2	SSMP female right angle	DC~50	1.5	Beryllium copper
QA220	2	QC2-MG-A220-5	2.4mm male	DC~50	1.35	Passivated stainless steel
QA220	2R	QC2-MRG-A220-1	2.4mm male right angle	DC~50	1.3	Passivated stainless steel
QA220	2F	QC2-FG-A220-1	2.4mm female	DC~50	1.3	Passivated stainless steel
QA220	2FL2	QC2-FL2G-A220-1	2.4mm female 2-Hole flange mount	DC~50	1.35	Passivated stainless steel
QA220	K	QCK-MG-A220-4	2.92mm male	DC~40	1.35	Passivated stainless steel
QA220	KR	QCK-MRG-A220-1	2.92mm male right angle	DC~40	1.3	Passivated stainless steel
QA220	KF	QCK-FG-A220-1	2.92mm female	DC~40	1.25	Passivated stainless steel
QA220	KF	QCK-FB-A220-1	2.92mm female	DC~40	1.35	Gold plated brass
QA220	KFL2	QCK-FL2G-A220-1	2.92mm female 2-Hole flange mount	DC~40	1.25	Passivated stainless steel
QA220	KFL4	QCK-FL4G-A220-1	2.92mm female 4-Hole flange mount	DC~40	1.25	Passivated stainless steel
QA220	KFH	QCK-FHG-A220-1	2.92mm female bulk head	DC~40	1.25	Passivated stainless steel
QA220	P	QCP-MB-086-1	SMP male	DC~40	1.4	Gold plated phosphor copper
QA220	PF	QCP-FB-086-3	SMP female	DC~40	1.4	Beryllium copper
QA220	A	QCA-MG-086-2	SSMA male	DC~26.5	1.25	Passivated stainless steel
QA220	3	QC3-MG-A220-1	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QA220	3F	QC3-FG-A220-1	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QA220	S	QCS-MG-A220-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QA220	SR	QCS-MRG-086-1	SMA male right angle	DC~18	1.25	Passivated stainless steel
QA220	SF	QCS-FB-086-4	SMA female	DC~18	1.25	Brass
QA220	SFL4	QCS-FL4B-086-1	SMA female 4-Hole flange mount	DC~18	1.25	Gold plated beryllium copper
QA220	N	QCN-MB-086-1	N male	DC~18	1.3	Nickel plated brass
QA300	2	QC2-MG-T50-2	2.4mm male	DC~50	-	Passivated stainless steel
QA300	2F	QC2-FG-T50-1	2.4mm female	DC~50	1.3	Passivated stainless steel
QA300	K	QCK-MG-T50-1	2.92mm male	DC~40	1.25	Passivated stainless steel
QA300	KF	QCK-FG-T50-1	2.92mm female	DC~40	1.25	Passivated stainless steel
QA360	2	QC2-MG-A360-2	2.4mm male	DC~40	1.25	Passivated stainless steel
QA360	2F	QC2-FG-A360-3	2.4mm female	DC~40	1.25	Passivated stainless steel
QA360	K	QCK-MG-A360-1	2.92mm male	DC~40	1.3	Passivated stainless steel
QA360	KR	QCK-MRG-A360-1	2.92mm male right angle	DC~40	1.35	Passivated stainless steel
QA360	KF	QCK-FG-A360-1	2.92mm female	DC~40	1.3	Passivated stainless steel
QA360	KFL2	QCK-FL2G-A360-1	2.92mm female 2-Hole flange mount	DC~40	1.3	Passivated stainless steel
QA360	KFL4	QCK-FL4G-A360-1	2.92mm female 4-Hole flange mount	DC~40	1.3	Passivated stainless steel
QA360	PF	QCP-FB-A360-3	SMP female	DC~40	1.4	Beryllium copper
QA360	A	QCA-MG-A360-1	SSMA male	DC~26.5	1.25	Passivated stainless steel
QA360	3	QC3-MG-A360-2	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QA360	3F	QC3-FG-A360-1	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QA360	SFR	QCS-FRG-A360-1	SMA female right angle	DC~18	1.4	Passivated stainless steel
QA360	S	QCS-MG-A360-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QA360	SR	QCS-MRG-A360-1	SMA male right angle	DC~18	1.3	Passivated stainless steel
QA360	SF	QCS-FG-A360-1	SMA female	DC~18	1.3	Passivated stainless steel
QA360	SFL4	QCS-FL4G-A360-1	SMA female 4-Hole flange mount	DC~18	1.3	Passivated stainless steel
QA360	N	QCN-MG-A360-1	N male	DC~18	1.25	Passivated stainless steel
QA360	NF	QCN-FG-A360-1	N female	DC~18	1.25	Passivated stainless steel
QA360	NFL4	QCN-FL4G-A360-1	N female 4-Hole flange mount	DC~18	1.35	Passivated stainless steel
QA360	T	QCT-MG-A360-2	TNC male	DC~18	1.25	Passivated stainless steel
QA400	K	QCK-MG-A400-1	2.92mm male	DC~40	1.3	Passivated stainless steel
QA400	KF	QCK-FG-A400-1	2.92mm female	DC~40	1.25	Passivated stainless steel
QA480/QA500/QG500	K	QCK-MG-A500-1	2.92mm male	DC~26.5	1.3	Passivated stainless steel
QA480/QA500/QG500	3	QC3-MG-A500-2	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QA480/QA500/QG500	3F	QC3-FG-A500-2	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QA480/QA500/QG500	S	QCS-MG-A500-2	SMA male	DC~26.5	1.3	Passivated stainless steel
QA480/QA500/QG500	SR	QCS-MRG-A500-2	SMA male right angle	DC~18	1.35	Passivated stainless steel
QA480/QA500/QG500	SF	QCS-FG-A500-2	SMA female	DC~26.5	1.3	Passivated stainless steel
QA480/QA500/QG500	NFH	QCN-FHG-A500-1	N female bulk head	DC~18	1.3	Passivated stainless steel
QA480/QA500/QG500	N	QCN-MG-A500-4	N male	DC~18	1.25	Passivated stainless steel
QA480/QA500/QG500	NR	QCN-MRG-A500-1	N male right angle	DC~18	1.25	Passivated stainless steel
QA480/QA500/QG500	NF	QCN-FG-A500-1	N female	DC~18	1.25	Passivated stainless steel
QA480/QA500/QG500	T	QCT-MG-A500-2	TNC male	DC~18	1.25	Passivated stainless steel
QA480/QA500/QG500	B	QCB-MG-A500-1	BNC male	DC~6	-	Passivated stainless steel
QA800	S	QCS-MG-A800-2	SMA male	DC~18	1.25	Passivated stainless steel
QA800	SR	QCS-MRG-A800-1	SMA male right angle	DC~18	1.35	Passivated stainless steel
QA800	SF	QCS-FG-A800-2	SMA female	DC~18	1.3	Passivated stainless steel
QA800	N	QCN-MG-A800-2	N male	DC~18	1.25	Passivated stainless steel

Matching Cable	Code	Part Number	Connector	FREQ. (GHz)	VSWR (max.)	Material
QA800	NR	QCN-MRG-A800-1	N male right angle	DC~18	1.25	Passivated stainless steel
QA800	NF	QCN-FG-A800-1	N female	DC~18	1.4	Passivated stainless steel
QA800	T	QCT-MG-A800-1	TNC male	DC~18	1.25	Passivated stainless steel
QA800	E	QCE-MG-A800-1	SC male	DC~8	1.3	Passivated stainless steel
QA800	7	QC7-MB-A800-1	7-16DIN male	DC~6	1.3	Ternary alloy plated brass
QA760/QA810	S	QCS-MG-A810-1	SMA male	DC~18	1.25	Passivated stainless steel
QA760/QA810	SF	QCS-FG-A810-1	SMA female	DC~18	1.3	Passivated stainless steel
QA760/QA810	N	QCN-MG-A810-1	N male	DC~18	1.25	Passivated stainless steel
QA760/QA810	NF	QCN-FG-A810-1	N female	DC~18	1.3	Passivated stainless steel
QA830	S	QCS-MG-A830-1	SMA male	DC~18	1.25	Passivated stainless steel
QA830	N	QCN-MG-A830-1	N male	DC~18	1.25	Passivated stainless steel
QB1200	N	QCN-MG-B1200-1	N male	DC~10	1.3	Passivated stainless steel
QB1200	E	QCE-MG-B1200-2	SC male	DC~8	1.3	Passivated stainless steel
QB1200	7	QC7-MB-B1200-1	7-16DIN male	DC~6	1.4	Ternary alloy plated brass
QB1500	N	QCN-MG-B1500-1	N male	DC~6	1.3	Passivated stainless steel
QB1500	7	QC7-MB-B1500-1	7-16DIN male	DC~6	1.4	Ternary alloy plated brass
QG360	S	QCS-MG-G360-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QG360	SF	QCS-FG-G360-1	SMA female	DC~18	1.3	Passivated stainless steel
QG360	N	QCN-MG-G360-1	N male	DC~18	1.25	Passivated stainless steel
QG800	S	QCS-MG-G800-1	SMA male	DC~18	1.3	Passivated stainless steel
QG800	SF	QCS-FG-G800-1	SMA female	DC~18	1.25	Passivated stainless steel
QG800	N	QCN-MG-G800-1	N male	DC~18	1.3	Passivated stainless steel
QG800	NF	QCN-FG-G800-1	N female	DC~18	1.3	Passivated stainless steel
QZ360	K	QCK-MG-Z360-1	2.92mm male	DC~40	1.25	Passivated stainless steel
QZ360	KR	QCK-MRG-Z360-1	2.92mm male right angle	DC~40	1.25	Passivated stainless steel
QZ360	KF	QCK-FG-Z360-1	2.92mm female	DC~40	1.25	Passivated stainless steel
QZ360	KFR	QCK-FRG-Z360-1	2.92mm female right angle	DC~40	1.25	Passivated stainless steel
QZ360	3	QC3-MG-Z360-1	3.5mm male	DC~26.5	1.25	Passivated stainless steel
QZ360	3F	QC3-FG-Z360-1	3.5mm female	DC~26.5	1.25	Passivated stainless steel
QZ360	S	QCS-MG-Z360-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QZ360	SF	QCS-FG-Z360-1	SMA female	DC~26.5	1.25	Passivated stainless steel
QZ360	N	QCN-MG-Z360-1	N male	DC~18	1.25	Passivated stainless steel
QZ500	S	QCS-MG-Z500-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QZ500	SF	QCS-FG-Z500-1	SMA female	DC~26.5	1.25	Passivated stainless steel
QZ500	N	QCN-MG-Z500-1	N male	DC~18	1.25	Passivated stainless steel
QZ600	S	QCS-MG-Z600-1	SMA male	DC~26.5	1.3	Passivated stainless steel
QZ600	SR	QCS-MRG-Z600-1	SMA male right angle	DC~18	1.25	Passivated stainless steel
QZ600	SF	QCS-FG-Z600-1	SMA female	DC~18	1.3	Passivated stainless steel
QZ600	SFH	QCS-FHG-Z600-1	SMA female bulk head	DC~18	1.25	Passivated stainless steel
QZ600	N	QCN-MG-Z600-1	N male	DC~18	1.25	Passivated stainless steel
QZ600	NR	QCN-MRG-Z600-1	N male right angle	DC~18	1.25	Passivated stainless steel
QZ600	NF	QCN-FG-Z600-1	N female	DC~18	1.25	Passivated stainless steel
QZ600	T	QCT-MG-Z600-1	TNC male	DC~18	1.25	Passivated stainless steel
QZ600	TR	QCT-MRG-Z600-1	TNC male right angle	DC~18	1.25	Passivated stainless steel
QR600/QR600U	S	QCS-MCB-R600-2	SMA male, crimp	DC~6	1.25	Ternary alloy plated brass
QR600/QR600U	SR	QCS-MRCB-R600-1	SMA male right angle, crimp	DC~6	1.3	Ternary alloy plated brass
QR600/QR600U	SF	QCS-FCB-R600-1	SMA female, crimp	DC~6	1.25	Brass
QR600/QR600U	N	QCN-MCB-R600-2	N male, crimp	DC~6	1.3	Brass
QR600/QR600U	B	QCB-MCB-R600-3	BNC male, crimp	DC~3	1.25	Brass
QR1000/QR1000U	S	QCS-MCB-R1000-1	SMA male, crimp	DC~6	1.15@DC~3GHz	Ternary alloy plated brass/ Nickel plated brass
QR1000/QR1000U	SR	QCS-MRCB-R1000-1	SMA male right angle, crimp	DC~6	1.2@DC~3GHz	Ternary alloy plated brass/ Nickel plated brass
QR1000/QR1000U	N	QCN-MCB-R1000-1	N male, crimp	DC~6	1.3	Brass
QR1000/QR1000U	NF	QCN-FCB-R1000-1	N female, crimp	DC~6	1.3	Ternary alloy plated brass
QR1000/QR1000U	NFH	QCN-FHCB-R1000-1	N female bulk head, crimp	DC~6	1.2	Nickel plated brass
QR1000/QR1000U	T	QCT-MCB-R1000-1	TNC male, crimp	DC~4	1.2	Ternary alloy plated brass
QR1500/QR1500U	S	QCS-MCB-R1500-1	SMA male, crimp	DC~6	1.3	Ternary alloy plated brass
QR1500/QR1500U	SR	QCS-MRCB-R1500-1	SMA male right angle, crimp	DC~6	1.2@DC~3GHz	Ternary alloy plated brass- Nickel plated brass
QR1500/QR1500U	N	QCN-MCB-R1500-1	N male, crimp	DC~6	1.3	Ternary alloy plated brass
QR1500/QR1500U	NR	QCN-MRCB-R1500-1	N male right angle, crimp	DC~6	1.2@DC~3GHz	Nickel plated brass
QA150/QH160/QD047/QE047	V	QCV-MG-047-1	1.85mm male	DC~67	1.3	Passivated stainless steel
QA150/QH160/QD047/QE047	2	QC2-MG-047-1	2.4mm male	DC~50	1.3	Passivated stainless steel
QA150/QH160/QD047/QE047	G	QCG-MB-047-1	SSMP male	DC~40	1.4	Beryllium copper
QA150/QH160/QD047/QE047	GR	QCG-MRB-047-1	SSMP male right angle	DC~18	1.3	Beryllium copper
QA150/QH160/QD047/QE047	K	QCK-MG-047-1	2.92mm male	DC~40	1.25	Passivated stainless steel

Matching Cable	Code	Part Number	Connector	FREQ. (GHz)	VSWR (max.)	Material
QA150/QH160/QD047/QE047	PF	QCP-FB-047-1	SMP female	DC~40	1.4	Beryllium copper
QA150/QH160/QD047/QE047	AF	QCA-FL2B-047-1	SSMA female	DC~26.5	1.35	Beryllium copper
QA150/QH160/QD047/QE047	AFL2	QCA-FL2G-047-1	SSMA female 4-Hole flange mount	DC~26.5	-	Beryllium copper
QA150/QH160/QD047/QE047	AFH	QCA-FHB-047-1	SSMA female bulk head	DC~26.5	1.25	Gold plated brass
QA150/QH160/QD047/QE047	S	QCS-MG-047-1	SMA male	DC~26.5	1.25	Passivated stainless steel
QA150/QH160/QD047/QE047	SR	QCS-MRG-047-1	SMA male right angle	DC~18	1.25	Passivated stainless steel
QA150/QH160/QD047/QE047	SF	QCS-FG-047-1	SMA female	DC~26.5	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	GF	QCG-FB-086-1	SSMP female	DC~40	1.4	Beryllium copper
QH280/QE086/QD086/RG316	TFH	QCT-FHB-086-1	TNC female bulk head	DC~6	1.3	Nickel plated brass
QH280/QE086/QD086/RG316	GFR	QCG-FRB-086-2	SSMP female right angle	DC~50	1.5	Beryllium copper
QH280/QE086/QD086/RG316	K	QCK-MG-086-3	2.92mm male	DC~40	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	KF	QCK-FB-086-1	2.92mm female	DC~40	1.25	Brass
QH280/QE086/QD086/RG316	KFL2	QCK-FL2G-A220-1	2.92mm female 2-Hole flange mount	DC~40	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	KFL4	QCK-FL4G-A220-1	2.92mm female 4-Hole flange mount	DC~40	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	PF	QCP-FB-086-3	SMP female	DC~40	1.4	Beryllium copper
QH280/QE086/QD086/RG316	PFR	QCP-FRB-086-1	SMP female right angle	DC~40	1.5	Beryllium copper
QH280/QE086/QD086/RG316	PFR	QCP-FRB-086-2	SMP female right angle	DC~18	1.3	Beryllium copper
QH280/QE086/QD086/RG316	A	QCA-MG-086-2	SSMA male	DC~26.5	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	AFH	QCA-FHB-086-1	SSMA female bulk head	DC~26.5	1.25	Brass
QH280/QE086/QD086/RG316	S	QCS-MB-086-4	SMA male	DC~26.5	1.25	Gold plated brass
QH280/QE086/QD086/RG316	S	QCS-MCB-RG316D-1	SMA male, crimp	DC~6	1.25	Gold plated brass
QH280/QE086/QD086/RG316	S	QCS-MG-086-3	SMA male	DC~26.5	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	SR	QCS-MRB-086-1	SMA male right angle	DC~12	1.25	Gold plated brass
QH280/QE086/QD086/RG316	SR	QCS-MRG-086-1	SMA male right angle	DC~18	1.25	Passivated stainless steel
QH280/QE086/QD086/RG316	SR	QCS-MRCB-RG316D-1	SMA male right angle, crimp	DC~6	1.3	Gold plated brass
QH280/QE086/QD086/RG316	SF	QCS-FB-086-2	SMA female	DC~26.5	1.25	Gold plated brass
QH280/QE086/QD086/RG316	SFL2	QCS-FL2B-086-1	SMA female 2-Hole flange mount	DC~18	1.25	Brass
QH280/QE086/QD086/RG316	SFL4	QCS-FL4B-086-1	SMA female 4-Hole flange mount	DC~18	1.25	Gold plated beryllium copper
QH280/QE086/QD086/RG316	SFH	QCS-FHB-086-2	SMA female bulk head	DC~18	1.25	Brass
QH280/QE086/QD086/RG316	N	QCN-MB-086-1	N male	DC~18	1.3	Nickel plated brass
QH280/QE086/QD086/RG316	NF	QCN-FB-086-1	N female	DC~18	1.25	Nickel plated brass
QH280/QE086/QD086/RG316	NFH	QCN-FHCB-RG316D-1	N female bulk head, crimp	DC~6	1.15	Nickel plated brass
QH280/QE086/QD086/RG316	M	QCM-MB-086-1	MCX male	DC~6	1.25	Brass
QH280/QE086/QD086/RG316	MR	QCM-MRB-086-2	MCX male right angle	DC~6	1.25	Gold plated brass/ Gold plated beryllium copper
QH280/QE086/QD086/RG316	MR	QCM-MRCB-RG316D-1	MCX male right angle, crimp	DC~6	-	Gold plated brass
QH280/QE086/QD086/RG316	MF	QCM-FB-086-1	MCX female	DC~6	1.2	Gold plated brass
QH280/QE086/QD086/RG316	X	QCX-MB-086-1	MMCX male	DC~6	1.25	Brass
QH280/QE086/QD086/RG316	XR	QCX-MRB-086-1	MMCX male right angle	DC~6	1.25	Brass
QH280/QE086/QD086/RG316	XF	QCX-FB-086-1	MMCX female	DC~3	1.2	Gold plated brass
QH280/QE086/QD086/RG316	B	QCB-MB-086-1	BNC male	DC~4	1.3	Ternary alloy plated brass
QH280/QE086/QD086/RG316	D	QCD-MB-086-1	SMB male	DC~6	1.2	Gold plated brass
QH280/QE086/QD086/RG316	DR	QCD-MRB-086-1	SMB male right angle	DC~4	1.3	Gold plated brass
QH280/QE086/QD086/RG316	DR	QCD-MRCB-RG316D-1	SMB male right angle, crimp	DC~3	1.2	Gold plated brass
QH280/QE086/QD086/RG316	DF	QCD-FB-086-1	SMB female	DC~6	1.25	Gold plated brass
QH280/QE086/QD086/RG316	DFR	QCD-FRB-086-1	SMB female right angle	DC~6	1.25	Gold plated brass
QH280/QE086/QD086/RG316	DFR	QCD-FRCB-RG316D-1	SMB female right angle, crimp	DC~4	1.3	Gold plated brass
QH280/QE086/QD086/RG316	Q	QCQ-MCB-316-1	QMA male	DC~6	1.25	Nickel plated brass
QH280/QE086/QD086/RG316	WR	QCW-MRB-086-1	SSMC male right angle	DC~6	-	Gold plated brass
QH280/QE086/QD086/RG316	W	QCW-MCB-316-1	SSMC male, crimp	DC~6	-	Gold plated brass
QH280/QE086/QD086/RG316	WR	QCW-MRCB-316-1	SSMC male right angle, crimp	DC~6	-	Gold plated brass
QH400/QE141/QD141	K	QCK-MG-141-1	2.92mm male	DC~40	1.35(DC~26.5GHz)	Gold plated brass
QH400/QE141/QD141	S	QCS-MG-141-3	SMA male	DC~26.5	1.25	Passivated stainless steel
QH400/QE141/QD141	SR	QCS-MRB-141-4	SMA male right angle	DC~6	1.25	Gold plated brass
QH400/QE141/QD141	SR	QCS-MRG-141-3	SMA male right angle	DC~18	1.25	Passivated stainless steel
QH400/QE141/QD141	SF	QCS-FB-141-1	SMA female	DC~18	1.25	Gold plated brass
QH400/QE141/QD141	SFL2	QCS-FL2B-141-1	SMA female 2-Hole flange mount	DC~18	1.25	Brass
QH400/QE141/QD141	SFL4	QCS-FL4B-141-1	SMA female 4-Hole flange mount	DC~18	1.25	Gold plated brass
QH400/QE141/QD141	SFH	QCS-FHB-141-1	SMA female bulk head	DC~18	1.25	Brass
QH400/QE141/QD141	N	QCN-MB-141-3	N male	DC~18	1.25	Nickel plated brass
QH400/QE141/QD141	NR	QCN-MRB-141-1	N male right angle	DC~6	1.3	Nickel plated brass
QH400/QE141/QD141	NR	QCN-MRB-141-2	N male right angle	DC~18	1.25	Gold plated brass
QH400/QE141/QD141	NF	QCN-FB-141-1	N female	DC~18	1.25	Nickel plated brass
QH400/QE141/QD141	B	QCB-MB-141-1	BNC male	DC~6	1.3	Ternary alloy plated brass
RG142/RG142U	S	QCS-MB-RG142-1	SMA male	DC~12.4	1.25	Brass
RG142/RG142U	S	QCS-MCB-RG142-3	SMA male, crimp	DC~6	1.15	Gold plated brass
RG142/RG142U	N	QCN-MB-142-1	N male	DC~12.4	1.25	Brass

Matching Cable	Code	Part Number	Connector	FREQ. (GHz)	VSWR (max.)	Material
RG142/RG142U	N	QCN-MCB-RG142-1	N male, crimp	DC~6	1.15	Ternary alloy plated brass
RG142/RG142U	NR	QCN-MRCB-RG142-1	N male right angle, crimp	DC~6	1.25	Brass
RG142/RG142U	4F	QC4-FHCB-RG142-1	4.3-10 female	DC~6	1.3	Gold plated phosphor copper or Gold plated brass
RG142/RG142U	B	QCB-MCB-RG142-1	BNC male, crimp	DC~3	1.25	Brass
RG142/RG142U	BF	QCB-FCB-RG142-1	BNC female, crimp	DC~4	1.25	Brass
RG142/RG142U	T	QCT-MCB-RG142-1	TNC male, crimp	DC~4	1.2	Nickel plated brass
RG223/RG58	B	QCB-MCB-RG142-1	BNC male, crimp	DC~3	1.25	Brass
RG223/RG58	BF	QCB-FCB-RG142-1	BNC female, crimp	DC~4	1.25	Brass

Multi-Channel Connectors



Qualwave provides various multi-channel cable and PCB connectors to meet different requirements. The frequency range covers DC~67GHz.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Multi-Channel Cable Connectors

Number of Channels	Part Number	Frequency (GHz)	Connector Type	Connector	Mating Cable	Mating Connector Type	Mating Connector	VSWR (typ.)
8	QC-8-FA-086-1	DC~40	Cable	female	QA220, QH280, QK086, QF086, QE086, QD086	Cable	QC-8-MA-086-1	1.25
8	QC-8-MA-086-1	DC~40	Cable	male	QA220, QH280, QK086, QF086, QE086, QD086	Cable	QC-8-FA-086-1	1.25
8	QC-8-FB-086-1	DC~67	Cable	female	QA220, QH280, QK086, QF086, QE086, QD086	PCB	QC-8-MB-01	1.25@DC~40GHz
8	QC-8-MK-086-2	DC~67	Cable	male	QA220, QH280, QK086, QF086, QE086, QD086	PCB	QC-8-FRB-01	1.25@DC~40GHz

Multi-Channel PCB Connectors

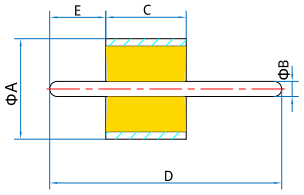
Number of Channels	Part Number	Frequency (GHz)	Connector Type	Connector	Mating Connector Type	Mating Connector	VSWR (typ.)
2	QC-2-MB-01	DC~67	PCB	SSMP male	SSMP female	SSMP female	1.25
4	QC-4-MB-01	DC~40	PCB	SSMP male	SSMP female	SSMP female	1.25
8	QC-8-MB-01	DC~40	PCB	Male	Cable	QC-8-FB-086-1	1.25
8	QC-8-FRB-01	DC~40	PCB	Female, right angle	Cable	QC-8-MK-086-2	1.25

Launch Accessories

Qualwave can provide connector accessories of different sizes and materials to meet different needs of customers.

Features: Low VSWR; **Applications:** Wireless, Radar, Instruments, Electronics.

Outer Conductor: Gold Plated Kovar
Dielectric: Glass
Inner Conductor: Gold Plated Kovar
Operating temperature: -55~+125°C



Part Number	Frequency (GHz)	A mm [inch]	B mm [inch]	C mm [inch]	D mm [inch]	E mm [inch]
QCFT-023-1	110	1.73 [0.068]	0.23 [0.009]	1.4 [0.055]	5.2 [0.205]	3.04 [0.12]
QCFT-023-2	110	1.73 [0.068]	0.23 [0.009]	1.4 [0.055]	2.7 [0.105]	0.508 [0.02]
QCFT-030-1	65	2 [0.079]	0.3 [0.012]	1.4 [0.055]	4.4 [0.173]	1.5 [0.059]
QCFT-030-2	65	2 [0.079]	0.3 [0.012]	1.4 [0.055]	8 [0.315]	4.6 [0.181]
QCFT-030-3	65	2 [0.079]	0.3 [0.012]	1.6 [0.063]	3.9 [0.154]	0.4 [0.016]
QCFT-030-4	65	2 [0.079]	0.3 [0.012]	1.6 [0.063]	8 [0.315]	4.6 [0.181]
QCFT-038-1	40	2.5 [0.098]	0.38 [0.015]	1.6 [0.063]	8 [0.315]	4.6 [0.181]
QCFT-038-2	40	2.5 [0.098]	0.38 [0.015]	1.6 [0.063]	12 [0.472]	2 [0.079]
QCFT-038-3	40	2.5 [0.098]	0.38 [0.015]	2 [0.079]	9 [0.354]	2 [0.079]
QCFT-038-4	40	2.5 [0.098]	0.38 [0.015]	3 [0.118]	12 [0.472]	2.2 [0.087]
QCFT-045-1	40	2.8 [0.11]	0.45 [0.018]	1.6 [0.063]	5.2 [0.205]	1.1 [0.043]
QCFT-045-2	40	2.8 [0.11]	0.45 [0.018]	1.6 [0.063]	8 [0.315]	4.6 [0.181]
QCFT-045-3	40	2.8 [0.11]	0.45 [0.018]	1.6 [0.063]	12 [0.472]	3 [0.118]
QCFT-050-1	35	3 [0.118]	0.5 [0.02]	1.6 [0.063]	7.8 [0.307]	2 [0.079]
QCFT-050-2	35	3 [0.118]	0.5 [0.02]	1.6 [0.063]	12 [0.472]	5 [0.197]
QCFT-050-3	35	3 [0.118]	0.5 [0.02]	2 [0.079]	6 [0.236]	1.5 [0.059]
QCFT-050-4	35	3 [0.118]	0.5 [0.02]	2 [0.079]	6.5 [0.256]	2.2 [0.087]
QCFT-050-5	35	3 [0.118]	0.5 [0.02]	2 [0.079]	8.5 [0.335]	2.2 [0.087]
QCFT-050-6	35	3 [0.118]	0.5 [0.02]	2 [0.079]	12 [0.472]	4 [0.157]
QCFT-050-7	35	3 [0.118]	0.5 [0.02]	2 [0.079]	12 [0.472]	5 [0.197]
QCFT-050-8	35	3 [0.118]	0.5 [0.02]	2 [0.079]	14 [0.551]	4 [0.157]
QCFT-050-9	35	3 [0.118]	0.5 [0.02]	4.2 [0.165]	9 [0.354]	2.2 [0.087]
QCFT-050-10	25	3 [0.118]	0.5 [0.02]	4.7 [0.185]	9.4 [0.37]	2.2 [0.087]
QCFT-050-11	25	3 [0.118]	0.5 [0.02]	4.7 [0.185]	12 [0.472]	2.2 [0.087]
QCFT-080-1	25	4.7 [0.185]	0.8 [0.031]	2 [0.079]	6.5 [0.256]	2 [0.079]
QCFT-090-1	25	5.5 [0.217]	0.9 [0.035]	3 [0.118]	9 [0.354]	3 [0.118]

Couplers

Qualwave supplies a series of broadband and high power couplers with a wide frequency range up to 110GHz.

Single Directional Couplers

Single directional coupler can be used to monitor and control the output power and frequency spectrum of transmitter. It can also be used as a power meter with detector and level indicator.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifiers, Broadcast, Laboratory Test, Telecom.

How To Order:

QUDC-V-W-X-Y-Z

- V: Single: S, Dual - D, Bi - B
- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Coupling (dB)
- Z: Power (W)
- Connector Type

Examples: To order a single directional coupler, 20M~1GHz, power 50W, coupling 10.5dB, SMA, specify QSDC-20-1000-50-10.5-S.

The sizes in the following table do not include connectors and terminations.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QSDC-0.009-50-K2-50-NS	9K~0.05	200	50±1	0.5	16	1.2	N&SMA	120*55.9*30
QSDC-0.009-250-K6-50-NS	9K~0.25	600	50±2	0.4	16	1.2	N&SMA	120*55.9*30
QSDC-0.009-400-K5-50-NS	9K~0.4	500	50±2	0.6	16	1.2	N&SMA	120*55.9*30
QSDC-1-10-K15-20-S	0.001~0.01	150	20±0.5	0.2	20	1.2	SMA	50.8*51*22.35
QSDC-10-500-K1-50-NS	0.01~0.5	100	50±1.5	0.2	18	1.2	N&SMA	49*44*26
QSDC-10-1000-1-11-S	0.01~1	1	11±2	1.8	13	1.5	SMA	32*32*10
QSDC-10-6000-R3-16-N	0.01~6	0.3	16±1.2	2.5	15	1.5	N	100.4*33.1*21.36
QSDC-20-1000-50-10.5-S	0.02~1	50	10.5±1	0.84	18	1.5	SMA	50.8*51*22.35
QSDC-20-1000-50-10.5-N	0.02~1	50	10.5±1	0.84	18	1.5	N	50.8*50.8*22.35
QSDC-20-1000-50-20-N	0.02~1	50	20±1.5	0.65	18	1.5	N	50.8*50.8*22.35
QSDC-20-1000-50-20-S	0.02~1	50	20±1.5	0.65	18	1.5	SMA	50.8*51*22.35
QSDC-20-1000-K15-50-S	0.02~1	150	50±1	0.4	20	1.5	SMA	51*50.8*22.35
QSDC-30-1000-50-20-S	0.03~1	50	20±1.5	0.65	20	1.5	SMA	50.8*51*22.35
QSDC-80-420-50-20-N-1	0.08~0.42	50	20±1	0.4	20	1.25	N&BNC	50.8*51*22.35
QSDC-80-420-50-40-N-1	0.08~0.42	50	40±1	0.4	20	1.25	N&BNC	50.8*51*22.35
QSDC-80-1000-K25-40-S	0.08~1	250	40±1	0.3	16	1.15	SMA	50.8*51*22.35
QSDC-80-1000-K25-40-N	0.08~1	250	40±1	0.3	16	1.2	N	120*55.9*30
QSDC-80-1000-K6-60-NS	0.08~1	600	60±1	0.4	20	1.2	N&SMA	152.4*80*30
QSDC-100-110-10-10-S	0.1~0.11	10	10±1	1	20	1.2	SMA	107*44*14
QSDC-100-700-10-10-S	0.1~0.7	10	10±2	0.9	12	1.3	SMA	250*66*15
QSDC-130-470-50-6-S	0.13~0.47	50	6±1.2	0.7	20	1.25	SMA	412*15*11
QSDC-200-300-K5-40-N	0.2~0.3	500	40±1.5	0.3	16	1.2	N	51*38.1*27.6
QSDC-200-2000-50-30-S	0.2~2	50	30±1.5	0.8	15	1.3	SMA	270*20*11
QSDC-300-800-50-30-S	0.3~0.8	50	30±1	0.3	10	1.2	SMA	180*15*11
QSDC-300-2400-30-10-S	0.3~2.4	30	10	1	18	1.3	SMA	115*15.5*11
QSDC-300-2400-30-20-S	0.3~2.4	30	20	1	18	1.3	SMA	115*15.5*11
QSDC-300-2400-30-30-S	0.3~2.4	30	30	1	18	1.3	SMA	115*15.5*11
QSDC-300-4000-50-30-S	0.3~4	50	30±1.5	1	12	1.4	SMA	186*20*11
QSDC-300-6000-K6-30-NS	0.3~6	600	30±0.9	0.7	15	1.4	N&SMA	217.9*43.4*30
QSDC-300-6000-K6-40-NS	0.3~6	600	40±1	0.7	15	1.4	N&SMA	217.9*43.4*30
QSDC-300-8000-20-20-S	0.3~8	20	20±1	1.3	18	1.35	SMA	152.4*18.54*12.7
QSDC-300-18000-30-6-S	0.3~18	30	6±0.8	3	13	1.4	SMA	178*23*15.4
QSDC-300-18000-30-10-S	0.3~18	30	10±0.8	2	13	1.4	SMA	178*23*15.4
QSDC-300-18000-30-20-S	0.3~18	30	20±0.8	1.4	13	1.4	SMA	178*23*15.4
QSDC-300-26500-30-6-S	0.3~26.5	30	6±0.9	3.5	11	1.5	SMA	178*23*15.4
QSDC-300-26500-30-10-S	0.3~26.5	30	10±0.9	2.7	11	1.5	SMA	178*23*15.4
QSDC-300-40000-20-30-K	0.3~40	20	30±1.2	4.2	10	1.7	2.92mm	178*23*15.4
QSDC-300-67000-12-20-V	0.3~67	12	20±2	6.1	7	1.9	1.85mm	178*23*15.4
QSDC-400-1560-30-10-S	0.4~1.56	30	10±1.5	1.1	20	1.3	SMA	115*15.5*11
QSDC-400-2500-10-10-S	0.4~2.5	10	10	1	18	1.3	SMA	115*15.5*11
QSDC-400-2500-10-20-S	0.4~2.5	10	20	0.6	18	1.3	SMA	115*16*11
QSDC-400-2500-10-30-S	0.4~2.5	10	30	0.5	18	1.3	SMA	115*16*11
QSDC-400-2700-K2-40-N	0.4~2.7	200	40±1.5	0.5	20	1.5	N	50*50*26

The sizes in the following table do not include connectors and terminations.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QSDC-400-2700-K4-40-N	0.4~2.7	400	40±1.2	0.4	20	1.2	N	158*53*26
QSDC-400-3000-10-20-S	0.4~3	10	20±1	0.5	20	1.3	SMA	149*25*14
QSDC-400-3000-K3-50-S	0.4~3	300	50±2.5	0.5	20	1.2	SMA	150*25*10
QSDC-400-3900-K1-20-N	0.4~3.9	100	20±2	0.5	17	1.2	N&SMA	99*42*22.5
QSDC-400-3900-K15-15-NS	0.4~3.9	150	15±1.5	0.5	16	1.25	N&SMA	113*25*20
QSDC-400-6000-K6-30-NS	0.4~6	600	30±0.8	0.6	15	1.3	N&SMA	187.5*43.4*30
QSDC-400-6000-K6-40-NS	0.4~6	600	40±0.9	0.6	15	1.3	N&SMA	187.5*43.4*30
QSDC-400-8000-K6-30-NS	0.4~8	600	30±0.9	0.7	14	1.4	N&SMA	187.5*43.4*30
QSDC-400-8000-K6-40-NS	0.4~8	600	40±1	0.7	14	1.4	N&SMA	187.5*43.4*30
QSDC-400-8000-K25-30-NS	0.4~8	250	30±0.9	0.7	14	1.4	N&SMA	187.5*43.4*30
QSDC-400-8000-K25-40-NS	0.4~8	250	40±1	0.7	14	1.4	N&SMA	187.5*43.4*30
QSDC-400-18000-50-10-S	0.4~18	50	10±1.5	1.5	10	1.8	SMA	113*15*11
QSDC-400-18000-50-20-S	0.4~18	50	20±1.5	1.5	10	1.8	SMA	113*15*11
QSDC-400-20000-10-20-S	0.4~20	10	20±1.5	1.5	8	1.5	SMA	137*15.5*11
QSDC-450-2500-50-6-S	0.45~2.5	50	6±1	0.8	18	1.2	SMA	112*17*11
QSDC-450-6000-30-10-S	0.45~6	30	10	1.2	12	1.5	SMA	115*16*11
QSDC-450-6000-30-20-S	0.45~6	30	20	1.2	12	1.5	SMA	115*16*11
QSDC-450-6000-30-30-S	0.45~6	30	30	1.2	12	1.5	SMA	115*16*11
QSDC-470-860-K5-30-7M7	0.47~0.86	500	30±0.75	0.3	20	1.15	7/16 DIN m/f	166*66*35
QSDC-470-860-K5-40-7M7	0.47~0.86	500	40±0.75	0.3	20	1.15	7/16 DIN m/f	166*66*35
QSDC-470-860-K5-50-7M7	0.47~0.86	500	50±0.75	0.3	20	1.15	7/16 DIN m/f	166*66*35
QSDC-500-1000-30-10-S	0.5~1	30	10	0.4	20	1.3	SMA	120*26*14
QSDC-500-1000-30-20-S	0.5~1	30	20	0.4	20	1.3	SMA	120*26*14
QSDC-500-1000-30-30-S	0.5~1	30	30	0.4	20	1.3	SMA	120*26*14
QSDC-500-2000-10-15-S	0.5~2	10	15±1	1	18	1.3	SMA	137*15.5*11
QSDC-500-2000-30-10-S	0.5~2	30	10	0.8	20	1.25	SMA	106*15.5*11
QSDC-500-2000-30-20-S	0.5~2	30	20	0.4	20	1.25	SMA	106*15.5*11
QSDC-500-2000-30-30-S	0.5~2	30	30	0.3	20	1.25	SMA	106*15.5*11
QSDC-500-2000-50-30-S	0.5~2	50	30±1	0.4	20	1.2	SMA	113*15*11
QSDC-500-3000-K5-60-NS	0.5~3	500	60±2	0.4	16	1.4	N&SMA	50*44*26
QSDC-500-6000-30-20-S	0.5~6	30	20±1	0.6	18	1.25	SMA	113*15*11
QSDC-500-6000-30-30-S	0.5~6	30	30±1.5	1	18	1.4	SMA	113*17*11
QSDC-500-6000-K2-40-S	0.5~6	200	40±2	0.6	15	1.5	S	38.1*38.1*27.6
QSDC-500-6000-K2-40-N	0.5~6	200	40±2	0.6	15	1.5	N	38.1*38.1*27.6
QSDC-500-6000-K3-40-N	0.5~6	300	40±2	0.6	15	1.5	N	38.1*38.1*27.6
QSDC-500-6000-K6-30-NS	0.5~6	600	30±0.7	0.6	15	1.3	N&SMA	174.8*30*43.4
QSDC-500-6000-K6-40-NS	0.5~6	600	40±0.8	0.6	15	1.3	N&SMA	174.8*30*43.4
QSDC-500-8000-50-10-S	0.5~8	50	10±1	1.2	15	1.4	SMA	113*15*11
QSDC-500-8000-50-20-S	0.5~8	50	20±1	1.2	12	1.5	SMA	113*15*11
QSDC-500-8000-K25-30-NS	0.5~8	250	30±0.8	0.7	14	1.4	N&SMA	174.8*30*43.4
QSDC-500-8000-K25-40-NS	0.5~8	250	40±0.9	0.7	14	1.4	N&SMA	174.8*30*43.4
QSDC-500-8000-K6-30-NS	0.5~8	600	30±0.8	0.7	14	1.4	N&SMA	174.8*30*43.4
QSDC-500-8000-K6-40-NS	0.5~8	600	40±0.9	0.7	14	1.4	N&SMA	174.8*30*43.4
QSDC-500-12000-80-20-S	0.5~12	80	20±1	1	12	1.6	SMA	113*15*11
QSDC-500-18000-50-10-S	0.5~18	50	10±1	1.6	10	1.6	SMA	113*15*11
QSDC-500-18000-50-10-N	0.5~18	50	10±1	1	15	1.4	N	116.5*17.5*23
QSDC-500-18000-50-20-S	0.5~18	50	20±1	1.6	10	1.6	SMA	113*15*11
QSDC-500-18000-50-20-N	0.5~18	50	20±1	1	15	1.4	N	116.5*17.5*23
QSDC-500-18000-50-30-S	0.5~18	50	30±1.5	1.6	10	1.6	SMA	113*15*11
QSDC-500-18000-50-30-N	0.5~18	50	30±1.5	1	15	1.4	N	116.5*17.5*23
QSDC-500-18000-30-6-S	0.5~18	30	6±0.8	2.6	14	1.5	SMA	111.8*17.8*12.7
QSDC-500-18000-K25-30-NS	0.5~18	250	30±1.2	1	10	1.6	N&SMA	168.8*20*35
QSDC-500-18000-K25-40-NS	0.5~18	250	40±1.2	1	10	1.6	N&SMA	168.8*20*35
QSDC-500-18000-K4-30-NS	0.5~18	400	30±1.2	1	10	1.6	N&SMA	174.8*30*43.4
QSDC-500-18000-K4-40-NS	0.5~18	400	40±1.2	1	10	1.6	N&SMA	174.8*30*43.4
QSDC-500-18500-20-10-S	0.5~18.5	20	10±1	1.6	10	1.6	SMA	113*15*11
QSDC-500-26500-30-6-S	0.5~26.5	30	6±0.8	2.9	13	1.6	SMA	111.8*17.8*12.7
QSDC-500-26500-30-10-S	0.5~26.5	30	10±0.7	2.2	14	1.5	SMA	111.8*17.8*12.7
QSDC-500-26500-30-20-S	0.5~26.5	30	20±0.7	1.4	14	1.5	SMA	111.8*17.8*12.7
QSDC-500-26500-30-30-S	0.5~26.5	30	30±1	1.3	13	1.6	SMA	111.8*17.8*12.7
QSDC-500-40000-20-6-K	0.5~40	20	6±1	3.9	10	1.7	2.92mm	111.8*17.8*12.7
QSDC-500-40000-20-10-K	0.5~40	20	10±1	2.9	10	1.7	2.92mm	111.8*17.8*12.7

The sizes in the following table do not include connectors and terminations.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QSDC-500-40000-20-20-K	0.5~40	20	20±1	2.6	10	1.7	2.92mm	111.8*17.8*12.7
QSDC-500-50000-20-10-2	0.5~50	20	10±1.2	3.6	8	1.8	2.4mm	111.8*17.8*12.7
QSDC-500-50000-20-20-2	0.5~50	20	20±1.2	3.3	8	1.8	2.4mm	111.8*17.8*12.7
QSDC-600-3000-K2-20-NS	0.6~3	200	20±1.2	0.7	16	1.35	N&SMA	120*26*22
QSDC-600-3000-K5-40-NS	0.6~3	500	40±1	0.35	16	1.5	N&SMA	80*40*22
QSDC-600-6000-50-10-S	0.6~6	50	10±1	1	15	1.3	SMA	112*17*12.7
QSDC-600-6000-50-20-S	0.6~6	50	20±1.2	0.8	18	1.3	SMA	113*15*11
QSDC-600-6000-50-30-S	0.6~6	50	30±1	0.5	15	1.3	SMA	100*15*11
QSDC-600-40000-30-10-K	0.6~40	30	10±2.8	3.8	8	1.8	2.92mm	154*15*11
QSDC-700-6000-50-20-S	0.7~6	50	20±1	0.7	16	1.3	SMA	115*16*11
QSDC-700-6000-50-20-N	0.7~6	50	20±1	1	12	1.3	N	125*20*20
QSDC-700-6000-K6-30-NS	0.7~6	600	30±0.7	0.5	15	1.3	N&SMA	144.3*30*43.3
QSDC-700-6000-K6-40-NS	0.7~6	600	40±0.7	0.5	15	1.3	N&SMA	144.3*30*43.3
QSDC-700-18000-K25-30-NS	0.7~18	250	30±1.2	0.9	10	1.6	N&SMA	144.3*30*43.3
QSDC-700-18000-K25-40-NS	0.7~18	250	40±1.2	0.9	10	1.6	N&SMA	144.3*30*43.3
QSDC-800-2700-50-10-S	0.8~2.7	50	10±1	1	18	1.2	SMA	112*17*12.7
QSDC-800-3500-K2-40-N	0.8~3.5	200	40±1.5	0.35	18	1.4	N	50*50*26
QSDC-800-6000-K4-20-NS	0.8~6	400	20±1	0.5	14	1.5	N&SMA	80*40*22
QSDC-910-920-K3-30-S	0.91~0.92	300	30±0.5	0.2	20	1.2	SMA	50*20*10
QSDC-1000-4000-30-10-S	1~4	30	10	1	20	1.3	SMA	73*15*11
QSDC-1000-4000-30-20-S	1~4	30	20	1	20	1.3	SMA	73*15*11
QSDC-1000-4000-30-30-S	1~4	30	30	0.5	20	1.3	SMA	73*15*11
QSDC-1000-4000-50-20-S	1~4	50	20±1	0.5	18	1.3	SMA	73*15*11
QSDC-1000-6000-K1-10-N	1~6	100	10±0.8	0.8	10	1.4	N	100*22*24
QSDC-1000-6000-K1-15-N	1~6	100	15±1.5	0.8	15	1.4	N	120*22*30
QSDC-1000-6000-K3-30-NS	1~6	300	30±1.5	0.6	16	1.35	N&SMA	100*26*22
QSDC-1000-6000-K1-40-NS	1~6	100	40±1	0.4	12	1.8	N&SMA	92*38*25.4
QSDC-1000-6000-K6-30-NS	1~6	600	30±0.7	0.5	15	1.3	N&SMA	107*30*43.4
QSDC-1000-6000-K6-40-NS	1~6	600	40±0.7	0.5	15	1.3	N&SMA	107*30*43.4
QSDC-1000-8000-30-30-S	1~8	30	30±1.2	0.8	15	1.5	SMA	73*15*11
QSDC-1000-12400-30-20-S	1~12.4	30	20±1	0.87	15	1.5	SMA	90*15.5*11
QSDC-1000-18000-30	1~18	30	10, 20, 30	1.5	10	1.6	SMA	90*15.5*11
QSDC-1000-18000-50-20-S	1~18	50	20±1	1.2	12	1.6	SMA	73*15*11
QSDC-1000-18000-30-6-S	1~18	30	6±0.6	2.5	15	1.5	SMA	88.9*17.8*12.7
QSDC-1000-18000-K25-30-NS	1~18	250	30±1.2	0.8	10	1.6	N&SMA	107.6*30*43.4
QSDC-1000-18000-K25-40-NS	1~18	250	40±1.2	0.8	10	1.6	N&SMA	107.6*30*43.4
QSDC-1000-18000-K4-30-NS	1~18	400	30±1.2	0.8	10	1.6	N&SMA	107.6*30*43.4
QSDC-1000-18000-K4-30-NS	1~18	400	40±1.2	0.8	10	1.6	N&SMA	107.6*30*43.4
QSDC-1000-26500-30-20-S	1~26.5	30	20±1.5	2.2	10	1.7	SMA	84*15*11
QSDC-1000-26500-30-6-S	1~26.5	30	6±0.7	2.8	13	1.6	SMA	88.9*17.8*12.7
QSDC-1000-26500-30-10-S	1~26.5	30	10±0.5	1.8	13	1.6	SMA	88.9*17.8*12.7
QSDC-1000-26500-30-30-S	1~26.5	30	30±0.8	1.1	13	1.5	SMA	88.9*17.8*12.7
QSDC-1000-40000-20-6-K	1~40	20	6±0.8	3.8	10	1.7	2.92mm	88.9*17.8*12.7
QSDC-1000-40000-20-30-K	1~40	20	30±1.2	1.9	9	1.7	2.92mm	88.9*17.8*12.7
QSDC-1000-40000-30-10-K	1~40	30	10±1.2	2.8	10	1.7	2.92mm	84*15*11
QSDC-1000-40000-30-16-K	1~40	30	16±1.5	2.6	10	1.7	2.92mm	84*15*11
QSDC-1000-40000-30-20-K	1~40	30	20±1.2	2.8	10	1.7	2.92mm	84*15*11
QSDC-1000-44000-1-10-2	1~44	1	10	2.5	10	2	2.4mm	90.2*18.5*13.5
QSDC-1000-50000-20-10-2	1~50	20	10±1	3.5	8	1.8	2.4mm	88.9*17.8*12.7
QSDC-1000-50000-20-20-2	1~50	20	20±2	3.0	9	1.8	2.4mm	88.9*17.8*12.7
QSDC-1000-67000-20-10-V	1~67	20	10±3.5	3.8	8	1.9	1.85mm	62.9*16*12.7
QSDC-1290-1310-70-6-N	1.29~1.31	70	6±1	1.8	20	1.3	N	120*40*16.5
QSDC-1290-1310-70-10-N	1.29~1.31	70	10±1	0.8	20	1.3	N	120*40*16.5
QSDC-1290-1310-K1-6-N	1.29~1.31	100	6±1	1.8	20	1.3	N	120*40*16.5
QSDC-1290-1310-K1-10-N	1.29~1.31	100	10±1	0.8	20	1.3	N	120*40*16.5
QSDC-1290-1310-K1-20-N	1.29~1.31	100	20±1	0.5	20	1.3	N	120*40*16.5
QSDC-2000-2500-K5-40-NS	2~2.5	500	40	0.4	15	1.4	N&SMA	44*26*22
QSDC-2000-3000-50-20-S	2~3	50	20	0.5	20	1.25	SMA	43*15*11
QSDC-2000-4000-50-10-S	2~4	50	10±1	1	18	1.3	SMA	43*15*11
QSDC-2000-4000-50-10-N	2~4	50	10±1	1	18	1.3	N	53*20*20
QSDC-2000-4000-50-20-S	2~4	50	20±1	0.4	18	1.3	SMA	43*15*11
QSDC-2000-4000-50-20-N	2~4	50	20±1	0.4	18	1.3	N	53*20*20

The sizes in the following table do not include connectors and terminations.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QSDC-2000-4000-50-30-S	2~4	50	30±1	0.4	18	1.3	SMA	43*15*11
QSDC-2000-4000-50-30-N	2~4	50	30±1	0.4	18	1.3	N	53*20*20
QSDC-2000-4000-K3-20-NS	2~4	300	20±1	0.4	18	1.35	N&SMA	44*26*22
QSDC-2000-4000-K4-40-N	2~4	400	40±1.5	0.5	10	1.3	N	50*50*19.5
QSDC-2000-4000-K5-50-NS	2~4	500	50±1.5	0.4	20	1.25	N&SMA	44*26*22
QSDC-2000-6000-K25-40-NS	2~6	250	40±2	0.6	11.5	1.3	N&SMA	50*50*22.5
QSDC-2000-6000-K6-30-NS	2~6	600	30±0.7	0.4	15	1.3	N&SMA	86.7*30*43.4
QSDC-2000-6000-K6-40-NS	2~6	600	40±0.7	0.4	15	1.3	N&SMA	86.7*30*43.4
QSDC-2000-8000-50-6-S	2~8	50	6±1	0.2	18	1.3	SMA	43*15*11
QSDC-2000-8000-50-10-S	2~8	50	10±1	1.2	16	1.3	SMA	43*15*11
QSDC-2000-8000-50-20-S	2~8	50	20±1	0.45	20	1.25	SMA	43*15*11
QSDC-2000-8000-50-30-S	2~8	50	30±1	0.4	20	1.2	SMA	86.7*30*43.4
QSDC-2000-8000-K25-30-NS	2~8	250	30±0.8	0.4	14	1.4	N&SMA	86.7*30*43.4
QSDC-2000-8000-K25-40-NS	2~8	250	40±0.8	0.4	14	1.4	N&SMA	86.7*30*43.4
QSDC-2000-8000-K5-30-NS	2~8	500	30±1	0.6	14	1.5	N&SMA	60*40*22
QSDC-2000-8000-K6-30-NS	2~8	600	30±0.8	0.4	14	1.4	N&SMA	86.7*30*43.4
QSDC-2000-8000-K6-40-NS	2~8	600	40±0.8	0.4	14	1.4	N&SMA	86.7*30*43.4
QSDC-2000-12000-30-10-S	2~12	30	10	1.1	12	1.5	SMA	51*16*11
QSDC-2000-18000-30-10-S	2~18	30	10	1	12	1.6	SMA	43*15*11
QSDC-2000-18000-30-20-S	2~18	30	20	1	12	1.6	SMA	43*15*11
QSDC-2000-18000-30-30-S	2~18	30	30	1	10	1.6	SMA	43*15*11
QSDC-2000-18000-30-6-S	2~18	30	6±0.6	2.3	15	1.6	SMA	57.2*17.8*12.7
QSDC-2000-18000-K2-50-NS	2~18	200	50±2	0.6	10	1.6	N&SMA	86.7*30*43.4
QSDC-2000-18000-K25-40-NS	2~18	250	40±1	0.6	10	1.6	N&SMA	80.7*35*20
QSDC-2000-18000-K4-30-NS	2~18	400	30±1	0.6	10	1.6	N&SMA	86.7*30*43.4
QSDC-2000-18000-K4-30-NS	2~18	400	40±1	0.6	10	1.6	N&SMA	86.7*30*43.4
QSDC-2000-26500-30-6-S	2~26.5	30	6±0.7	2.6	13	1.6	SMA	57.2*17.8*12.7
QSDC-2000-26500-30-10-S	2~26.5	30	10±0.5	1.5	13	1.5	SMA	57.2*17.8*12.7
QSDC-2000-26500-30-20-S	2~26.5	30	20±0.5	1	14	1.5	SMA	57.2*17.8*12.7
QSDC-2000-26500-30-30-S	2~26.5	30	30±0.6	1	13	1.5	SMA	57.2*17.8*12.7
QSDC-2000-40000-20-6-K	2~40	20	6±0.8	3.6	10	1.7	2.92mm	57.2*17.8*12.7
QSDC-2000-40000-20-30-K	2~40	20	30±0.8	1.4	10	1.7	2.92mm	57.2*17.8*12.7
QSDC-2000-40000-30-10-K	2~40	30	10±1.5	2	10	1.7	2.92mm	48*15*11
QSDC-2000-40000-30-16-K	2~40	30	6±1.2	1.5	10	1.7	2.92mm	48*15*11
QSDC-2000-40000-30-20-K	2~40	30	20±1.5	1.5	10	1.6	2.92mm	48*15*11
QSDC-2000-50000-20-10-2	2~50	20	10±0.8	2.1	9	1.8	2.4mm	57.2*17.8*12.7
QSDC-2000-50000-20-20-2	2~50	20	20±1.1	2	8	1.8	2.4mm	57.2*17.8*12.7
QSDC-2000-67000-10-16-V	2~67	10	16±4	3.5	8	2	1.85mm	62.9*15*11
QSDC-2000-67000-12-10-V	2~67	12	10±1.2	2.7	7	1.9	1.85mm	57.2*17.8*12.7
QSDC-2200-2300-20-10-N	2.2~2.3	20	10±1	0.5	20	1.3	N	55*30*19
QSDC-2200-2300-20-20-N	2.2~2.3	20	20±1	0.5	20	1.3	N	55*30*19
QSDC-2300-2600-K5-40-NS	2.3~2.6	500	40±0.5	0.4	20	1.25	N&SMA	44*26*22
QSDC-2500-6000-50-6-S	2.5~6	50	6±1	0.8	20	1.2	SMA	43*15*11
QSDC-2700-3100-K2-40-NS	2.7~3.1	200	40±2	0.3	18	1.3	N&SMA	44*26*22
QSDC-3000-6000-10-20-S	3~6	10	20±1	0.5	18	1.3	SMA	43*15*11
QSDC-3400-4200-50-30-S	3.4~4.2	50	30±1	0.5	15	1.3	SMA	43*15*11
QSDC-3500-4500-10-20-S	3.5~4.5	10	20±1	0.5	20	1.3	SMA	43*15*11
QSDC-3800-4300-50-20-N	3.8~4.3	50	20±1	0.5	20	1.3	N	20*20*53
QSDC-4000-6000-K4-40-N	4~6	400	40±1.5	0.6	10	1.3	N&SMA	50*50*19.5
QSDC-4000-8000-50-10-S	4~8	50	10±1	1	16	1.3	SMA	43*15*11
QSDC-4000-12000-50-6-S	4~12	50	6±1	1.2	12	1.5	SMA	33*15*11
QSDC-4000-16000-30-10-S	4~16	30	10±1.2	1.2	12	1.5	SMA	43*15*11
QSDC-4000-18000-20-10-S	4~18	20	10±1	1	12	1.5	SMA	33*15*11
QSDC-4000-18000-20-20-S	4~18	20	20±1	1	12	1.5	SMA	33*15*11
QSDC-4000-18000-20-30-S	4~18	20	30±1	1	10	1.5	SMA	33*15*11
QSDC-4000-18000-K3-30-1	4~18	300	30±1.5	0.9	10	1.4	N&SMA	77.8*23.8*30.5
QSDC-4000-18000-K3-30-2	4~18	300	30±1.5	0.9	10	1.4	N	77.8*23.8*30.5
QSDC-4000-18000-K3-40-1	4~18	300	40±1.5	0.9	10	1.4	N&SMA	77.8*23.8*30.5
QSDC-4000-18000-K3-40-2	4~18	300	40±1.5	0.9	10	1.4	N	77.8*23.8*30.5
QSDC-4000-30000-30-20-K	4~30	30	20±1	1.5	12	1.6	2.92mm	48*15*11
QSDC-4000-50000-20-10-2	4~50	20	10±2	2	10	1.8	2.4mm	50.45*15*11
QSDC-6000-18000-30-6-S	6~18	30	6±0.5	2	15	1.4	SMA	31.8*17.8*12.7

The sizes in the following table do not include connectors and terminations.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QSDC-6000-18000-50-10-S	6~18	50	10±1	1	12	1.5	SMA	33*15*11
QSDC-6000-18000-50-20-S	6~18	50	20±1	0.6	12	1.5	SMA	33*15*11
QSDC-6000-18000-50-30-S	6~18	50	30±1	0.6	12	1.5	SMA	33*15*11
QSDC-6000-18000-K2-30-NS	6~18	200	30±1.5	0.5	10	1.8	N&SMA	30*38*25.4
QSDC-6000-18000-K25-30-NS	6~18	250	30±1	0.5	10	1.6	N&SMA	69.7*20*35
QSDC-6000-18000-K25-40-NS	6~18	250	40±1	0.5	10	1.6	N&SMA	69.7*20*35
QSDC-6000-18000-K4-40-NS	6~18	400	40±1	0.5	10	1.6	N&SMA	75.7*30*43.4
QSDC-6000-18200-30-6-S	6~18.2	30	6±1	1.2	12	1.5	SMA	33*15*11
QSDC-6000-18200-30-10-S	6~18.2	30	10±1	1	12	1.5	SMA	33*15*11
QSDC-6000-18200-30-30-S	6~18.2	30	30±1	0.6	12	1.5	SMA	33*15*11
QSDC-6000-26500-30-6-S	6~26.5	30	6±0.6	2.3	14	1.5	SMA	31.8*17.8*12.7
QSDC-6000-26500-30-10-S	6~26.5	30	10±0.6	1.3	13	1.4	SMA	31.8*15.9*12.7
QSDC-6000-26500-30-20-S	6~26.5	30	20±0.5	0.7	15	1.4	SMA	31.8*15.9*12.7
QSDC-6000-26500-30-30-S	6~26.5	30	30±0.7	0.8	13	1.5	SMA	31.8*15.9*12.7
QSDC-6000-40000-20-6-K	6~40	20	6±0.8	2.6	10	1.7	2.92mm	31.8*17.8*12.7
QSDC-6000-40000-20-10-K	6~40	20	10±0.7	1.6	10	1.6	2.92mm	31.8*15.9*12.7
QSDC-6000-40000-20-20-K	6~40	20	20±0.7	1.3	10	1.6	2.92mm	31.8*15.9*12.7
QSDC-6000-40000-20-30-K	6~40	20	30±0.7	1.0	10	1.7	2.92mm	31.8*15.9*12.7
QSDC-6000-50000-20-10-2	6~50	20	10±0.8	1.9	8	1.8	2.4mm	31.8*15.9*12.7
QSDC-6000-67000-12-10-V	6~67	12	10±1.1	2.5	7	1.9	1.85mm	31.8*15.9*12.7
QSDC-6500-11500-20-20-S	6.5~11.5	20	20±1	1	12	1.5	SMA	33*15*11
QSDC-7000-7300-60-30-S	7~7.3	60	30±1	0.5	16	1.5	SMA	33*15*11
QSDC-7000-12400-50-10-S	7~12.4	50	10±1	1	12	1.5	SMA	33*15*11
QSDC-7000-12400-50-20-S	7~12.4	50	20±1	1	12	1.5	SMA	33*15*11
QSDC-7000-12400-50-30-S	7~12.4	50	30±1	1	12	1.5	SMA	33*15*11
QSDC-8000-8400-20-10-N	8~8.4	20	10±1	1	12	1.6	N	47*22*19
QSDC-8000-8400-20-20-N	8~8.4	20	20±1	1	12	1.6	N	47*22*19
QSDC-8000-12000-40-15-S	8~12	40	15±1	0.8	12	1.5	SMA	43*15*11
QSDC-8000-12400-K1-30-N	8~12.4	100	30±1	0.4	10	1.4	N	60*30*24
QSDC-10750-12750-50-20-S	10.75~12.75	50	20±1	0.6	15	1.3	SMA	33*15*11
QSDC-10750-12750-50-30-S	10.75~12.75	50	30±1	0.5	15	1.4	SMA	33*15*11
QSDC-12000-13000-10-6-S	12~13	10	6±1	0.8	12	1.5	SMA	56*15*11
QSDC-12000-18000-50-30-S	12~18	50	30±1	1	12	1.5	SMA	33*15*11
QSDC-12400-18000-50-10-S	12.4~18	50	10±1	0.8	12	1.4	SMA	33*15*11
QSDC-12400-18000-50-20-S	12.4~18	50	20±1	0.8	12	1.4	SMA	33*15*11
QSDC-14000-15000-50-10-S	14~15	50	10±1	0.6	15	1.4	SMA	33*15*11
QSDC-14000-15000-50-20-S	14~15	50	20±1	0.6	15	1.4	SMA	33*15*11
QSDC-18000-26500-30-6-S	18~26.5	30	6±0.5	2.3	14	1.5	SMA	31.8*17.8*12.7
QSDC-18000-31000-30-20-K	18~31	30	20±1	1.4	12	1.6	2.92mm	28*15*11
QSDC-18000-40000-20-6-K	18~40	20	6±0.7	2.6	12	1.7	2.92mm	31.8*17.8*12.7
QSDC-18000-40000-30-10-K	18~40	30	10±1	1.6	10	1.6	2.92mm	28*15*11
QSDC-18000-40000-30-20-K	18~40	30	20±1	1.1	12	1.6	2.92mm	28*15*11
QSDC-18000-40000-30-30-K	18~40	30	30±1	1	10	1.6	2.92mm	28*15*11
QSDC-18000-50000-20-10-2	18~50	20	10±0.7	1.8	9	1.8	2.4mm	31.8*15.9*12.7
QSDC-18000-50000-20-20-2	18~50	20	20±0.8	1.5	8	1.8	2.4mm	31.8*15.9*12.7
QSDC-18000-67000-12-10-V	18~67	12	10±1	2.5	7	1.9	1.85mm	31.8*15.9*12.7
QSDC-20000-50000-10-10-2	20~50	10	10±1.2	1.8	10	1.9	2.4mm	26*15*11
QSDC-20000-50000-10-20-2	20~50	10	20±1.2	1.6	10	1.9	2.4mm	26*15*11
QSDC-20000-50000-10-30-2	20~50	10	30±1.2	1.2	8	1.9	2.4mm	26*15*11
QSDC-26000-30000-30-10-K	26~30	30	10±1	1.6	12	1.6	2.92mm	28*15*11
QSDC-26000-30000-30-20-K	26~30	30	20±1	1.6	12	1.6	2.92mm	28*15*11
QSDC-26000-30000-30-30-K	26~30	30	30±1	1.6	12	1.6	2.92mm	28*15*11
QSDC-26500-40000-20-6-K	26.5~40	20	6±0.7	2.6	12	1.7	2.92mm	31.8*17.8*12.7
QSDC-26500-67000-12-10-V	26.5~67	12	10±1	2.5	7	1.9	1.85mm	31.8*15.9*12.7
QSDC-40000-67000-12-10-V	40~67	12	10±1	2.5	7	1.9	1.85mm	31.8*15.9*12.7
QSDC-65000-86000-20-10-1	65~86	20	10±3	2	12	2.5	1.0mm	70*40*13

Dual Directional Couplers

Dual directional coupler is a four-port component, with signal from the input port taken by the forward coupling interface and signal from the output port taken by the reverse coupling port. It is a standard component commonly used in microwave measurement and a key component for reflectometer, RF network analyzer and other instruments. It can be used to monitor the output power and output spectrum of the transmitter, test the reflected power from the transmitter to the antenna, monitor the matching of the antenna feeder system, and control the power of the transmitter. It can also be used as a power meter in coordination with geophone and level indicator.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifier, Transmitter, Radar, Laboratory Test.

How To Order:

QUDC-V-W-X-Y-Z

- V: Single: S, Dual - D, Bi - B
- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Connector Type
- Z: Coupling (dB)
- Power (W)

Examples: To order a dual directional coupler, 0.1~1000MHz, power 100W, coupling 40dB, main line N, secondary line SMA, specify QDDC-0.1-1000-K1-40-NS.

Dual Directional Couplers

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QDDC-0.009-100-K5-50-NS	9K~0.1	500	50±1	0.3	16	1.2	N&SMA	137.16*30.48*55.9
QDDC-0.009-260-K2-40-NS	9K~0.26	200	40±1.5	0.3	14	1.2	N&SMA	152.4*55.9*55.9
QDDC-9K-260-1K-40-NS	9K~0.26	1000	40±1.5	0.4	10	1.25	N&SMA	120*55*40
QDDC-9K-1000-K1-40-NS	9K~1	100	40±1.5	0.6	13	1.25	N&SMA	132.2*57.8*43.3
QDDC-9K-1000-K3-40-NS	9K~1	300	40±1.5	0.6	13	1.25	N&SMA	132.2*57.8*43.3
QDDC-0.01-100-K5-50-NS	10K~0.1	500	50±1	0.5	16	1.3	N&SMA	120*55.9*30
QDDC-0.01-260-K25-40-NNM	10K~0.26	250	40±1	0.3	14	1.3	N	152.4*55.9*55.9
QDDC-0.1-1000-K1-40-NS	100K~1	100	40±1.2	1	13	1.25	N&SMA	132*68*43
QDDC-0.25-300-1K-50-NS	250K~0.3	1000	50±2	0.5	16	1.2	N&SMA	140*65*45
QDDC-0.25-300-1K-50-N	250K~0.3	1000	50±2	0.5	16	1.2	N	140*65*45
QDDC-0.5-32-50-30-N	500K~0.032	50	30±1	0.2	20	1.1	N	50.8*51*22.35
QDDC-0.5-32-5K-40-N7	500K~0.032	5000	40±1	0.15	18	1.2	N&L29	125*110*50
QDDC-1-10-K15-20-S	0.001~0.01	150	20±0.5	0.2	20	1.2	SMA	51*50.8*22.35
QDDC-1-50-3K-58-NS	0.001~0.05	3000	58±5@30 ~50MHz	0.1	20	1.1	N&SMA	60*36*25
QDDC-1.6-30-2K5-50-N	0.0016~0.03	2500	50±0.5	0.05	-	1.15	N	120*55.9*30
QDDC-2-30-2K-50-NS	0.002~0.03	2000	50±1.5	0.3	18	1.2	N&SMA	120*107*38
QDDC-2-32-1K-40-NS	0.002~0.032	1000	40±1	0.5	20	1.2	N&SMA	120*55.9*30
QDDC-2-32-1K-50-NS	0.002~0.032	1000	50±1.5	0.3	20	1.2	N&SMA	120*55.9*30
QDDC-10-170-5K-60-S7	0.01~0.17	5000	60±1.5	0.2	16	1.2	SMA&L29	152.4*55.9*55.9
QDDC-20-200-1-20-N	0.02~0.2	1	20±1	0.3	20	1.35	N	60*38.1*27.6
QDDC-20-520-50-50-S	0.02~0.52	50	50±1	0.35	20	1.25	SMA	58*44*15
QDDC-20-1000-K15-50-S	0.02~1	150	50±1	0.4	20	1.5	SMA	51*50.8*22.35
QDDC-20-1000-K3-50-N	0.02~1	300	50±1	0.4	20	1.5	N	60*55*22
QDDC-20-3000-20-20-S	0.02~3	20	20±1.5	1.3	15	1.8	SMA	51*50.8*22.35
QDDC-25-1000-1K-50-NS	0.025~1	1000	50±1.5	0.5	15	1.2	N&SMA	120*55.9*30
QDDC-30-80-1K5-50-NS	0.03~0.08	1500	50±1	0.4	20	1.1	N&SMA	60*36*25
QDDC-30-80-2K-60-NS	0.03~0.08	2000	60±1	0.2	20	1.1	N&SMA	60*40*25
QDDC-33-55-K2-50	0.033~0.055	200	50±1	0.4	20	1.5	-	50.8*51*22.35
QDDC-40-300-10-10-S	0.04~0.3	10	10±1	1.8	16	1.5	SMA	100*50*45
QDDC-80-1000-1K-50-NS	0.08~1	1000	50±1	0.3	20	1.3	N&SMA	85*44*26
QDDC-80-1000-1K5-50-NS	0.08~1	1500	50±1	0.3	20	1.15	N&SMA	150*65*30
QDDC-80-1000-2K-40-7S	0.08~1	2000	40±1.5	0.25	20	1.2	7/16DIN&SMA	85*50*32
QDDC-80-1000-2K-50-7S	0.08~1	2000	50±1	0.3	20	1.3	7/16DIN&SMA	85*50*32
QDDC-80-1000-2K-60-7S	0.08~1	2000	60±1.5	0.25	20	1.2	7/16DIN&SMA	85*50*32
QDDC-80-3000-K15-50-N	0.08~3	150	50±1	0.8	14	1.5	N	160*24*30
QDDC-100-1000-K2-20-N	0.1~1	200	20±1	0.2	20	1.2	N	127*68.58*24
QDDC-100-3000-K25-45-S	0.1~3	250	45±2	0.4	15	1.25	SMA	63.5*38.1*14.76
QDDC-200-400-1K-40-NS	0.2~0.4	1000	40±1	0.2	20	1.15	N&SMA	120*55.9*30
QDDC-225-460-K5-30-N	0.225~0.46	500	30±1	0.3	20	1.1	N	50.8*51*22.35
QDDC-300-2000-1K-50-N	0.3~2	1000	50±2	0.5	16	1.15	N	120*55.9*30

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QDDC-300-6000-K6-30-NS	0.3~6	600	30±0.9	0.7	15	1.4	N&SMA	225.9*25.4*47.5
QDDC-300-6000-K6-40-NS	0.3~6	600	40±1.0	0.7	15	1.4	N&SMA	225.9*25.4*47.5
QDDC-300-8000-20-20-S	0.3~8	20	20±1	1.1	18	1.35	SMA	152.4*18.54*12.7
QDDC-300-18000-30-20-S	0.3~18	30	20±1	1.8	14	1.5	SMA	178.4*12.7*24
QDDC-300-18000-30-30-S	0.3~18	30	30±1	1.7	14	1.5	SMA	178.4*12.7*24
QDDC-400-450-20-40-S	0.4~0.45	20	40±1	0.3	20	1.3	SMA	288*27*15
QDDC-400-2500-K5-50-NS	0.4~2.5	500	50±1.2	0.3	18	1.3	N&SMA	85*44*26
QDDC-400-6000-K6-30-NS	0.4~6	600	30±0.8	0.6	15	1.3	N&SMA	195.5*25.4*47.5
QDDC-400-6000-K6-40-NS	0.4~6	600	40±0.9	0.6	15	1.3	N&SMA	195.5*25.4*47.5
QDDC-400-8000-K25-30-NS	0.4~8	250	30±0.9	0.7	14	1.4	N&SMA	195.5*25.4*47.5
QDDC-400-8000-K25-40-NS	0.4~8	250	40±1.0	0.7	14	1.4	N&SMA	195.5*25.4*47.5
QDDC-400-8000-K6-30-NS	0.4~8	600	30±0.9	0.7	14	1.4	N&SMA	195.5*25.4*47.5
QDDC-400-8000-K6-40-NS	0.4~8	600	40±1.0	0.7	14	1.4	N&SMA	195.5*25.4*47.5
QDDC-500-2000-K8-50-NS	0.5~2	800	50±0.8	0.3	18	1.35	N&SMA	85*44*26
QDDC-500-3000-K5-60-NS	0.5~3	500	60±2	0.4	16	1.4	N&SMA	85*44*26
QDDC-500-6000-K25-40-N	0.5~6	250	40	0.5	10	1.25	N	131*39*20
QDDC-500-6000-K3-40-N	0.5~6	300	40±2	0.6	15	1.5	N	38.1*38.1*27.6
QDDC-500-6000-K4-40-N	0.5~6	400	40±2	0.5	15	1.5	N	38.1*38.1*27.6
QDDC-500-6000-K6-30-NS	0.5~6	600	30±0.7	0.6	15	1.3	N&SMA	182.8*25.4*47.5
QDDC-500-6000-K6-40-NS	0.5~6	600	40±0.8	0.6	15	1.3	N&SMA	182.8*25.4*47.5
QDDC-500-8000-K25-30-NS	0.5~8	250	30±0.8	0.7	14	1.4	N&SMA	182.8*25.4*47.5
QDDC-500-8000-K25-40-NS	0.5~8	250	40±0.9	0.7	14	1.4	N&SMA	182.8*25.4*47.5
QDDC-500-8000-K6-30-NS	0.5~8	600	30±0.8	0.7	14	1.4	N&SMA	182.8*25.4*47.5
QDDC-500-8000-K6-40-NS	0.5~8	600	40±0.9	0.7	14	1.4	N&SMA	182.8*25.4*47.5
QDDC-500-18000-30-10-S	0.5~18	30	10±0.7	3.3	15	1.5	SMA	223.5*15.4*15.9
QDDC-500-18000-K25-30-NS	0.5~18	250	30±1.2	1	10	1.6	N&SMA	182.8*25.4*47.5
QDDC-500-18000-K25-40-NS	0.5~18	250	40±1.2	1	10	1.6	N&SMA	182.8*25.4*47.5
QDDC-500-18000-K4-30-NS	0.5~18	400	30±1.2	1	10	1.6	N&SMA	182.8*25.4*47.5
QDDC-500-18000-K4-30-NS	0.5~18	400	40±1.2	1	10	1.6	N&SMA	182.8*25.4*47.5
QDDC-500-40000-20-10-K	0.5~40	20	10±0.9	5	12	1.7	2.92mm	223.5*15.4*15.9
QDDC-600-2700-K8-50-NS	0.6~2.7	800	50±1.2	0.3	20	1.3	N&SMA	85*44*26
QDDC-700-6000-50-10-S	0.7~6	50	10±1.2	2.2	12	1.4	SMA	202*16*11
QDDC-700-6000-50-30-S	0.7~6	50	30±1.5	1.2	10	1.4	SMA	202*16*11
QDDC-700-6000-K5-35-NS	0.7~6	500	35±1	0.5	12	1.7	SMA, N	92*38*25.4
QDDC-700-6000-K6-30-NS	0.7~6	600	30±0.7	0.5	15	1.3	N&SMA	152.3*25.4*47.5
QDDC-700-6000-K6-40-NS	0.7~6	600	40±0.7	0.5	15	1.3	N&SMA	152.3*25.4*47.5
QDDC-700-18000-K25-30-NS	0.7~18	250	30±1.2	0.9	10	1.6	N&SMA	152.3*25.4*47.5
QDDC-700-18000-K25-40-NS	0.7~18	250	40±1.2	0.9	10	1.6	N&SMA	152.3*25.4*47.5
QDDC-940-1900-50-20-S	0.94~1.9	50	20±1	0.35	20	1.2	SMA	73*20*11
QDDC-1000-2000-K5-30-N	1~2	500	30±1	0.25	26	1.5	N	38.1*38.1*27.6
QDDC-1000-2000-K5-50-N	1~2	500	50±1	0.25	26	1.5	N	38.1*38.1*27.6
QDDC-1000-6000-50-10-S	1~6	50	10±1	2	18	1.3	SMA	140*12*18
QDDC-1000-6000-50-10-N	1~6	50	10±1	0.5	16	1.3	N	90*20*40
QDDC-1000-6000-50-10-NS	1~6	50	10±1	2	18	1.3	NS	140*20*20
QDDC-1000-6000-50-40-S	1~6	50	40±1.2	2	18	1.3	SMA	140*12*18
QDDC-1000-6000-50-40-N	1~6	50	40±1.2	0.5	16	1.3	N	90*20*40
QDDC-1000-6000-50-40-NS	1~6	50	40±1.2	2	18	1.3	NS	140*20*20
QDDC-1000-6000-K1-10-N	1~6	100	10±0.8	0.7	10	1.4	N	100*30*24
QDDC-1000-6000-K1-10-NS	1~6	100	10±0.8	0.7	10	1.4	NS	92*38*25.4
QDDC-1000-6000-K1-40-N	1~6	100	40±1.5	0.7	16	1.4	N	100*30*24
QDDC-1000-6000-K1-40-NS	1~6	100	40±1.5	0.7	16	1.4	NS	92*38*25.4
QDDC-1000-6000-K5-40-NS	1~6	500	40±1	0.5	12	1.7	N&SMA	92*38*25.4
QDDC-1000-6000-K6-30-NS	1~6	600	30±0.7	0.5	15	1.3	N&SMA	115.6*25.4*47.5
QDDC-1000-6000-K6-40-NS	1~6	600	40±0.7	0.5	15	1.3	N&SMA	115.6*25.4*47.5
QDDC-1000-18000-30-10-S	1~18	30	10±0.7	2.7	14	1.5	SMA	140*12.7*15.9
QDDC-1000-18000-30-20-S	1~18	30	20±0.7	1	14	1.5	SMA	78*12.7*24
QDDC-1000-18000-30-30-S	1~18	30	30±0.7	0.9	14	1.5	SMA	78*12.7*24
QDDC-1000-18000-K25-30-NS	1~18	250	30±1.2	0.8	10	1.6	N&SMA	115.6*25.4*47.5
QDDC-1000-18000-K25-40-NS	1~18	250	40±1.2	0.8	10	1.6	N&SMA	115.6*25.4*47.5
QDDC-1000-18000-K4-30-NS	1~18	400	30±1.2	0.8	10	1.6	N&SMA	115.6*25.4*47.5
QDDC-1000-18000-K4-40-NS	1~18	400	40±1.2	0.8	10	1.6	N&SMA	115.6*25.4*47.5
QDDC-1000-26500-30-20-S	1~26.5	30	20±0.8	1.3	12	1.6	SMA	78*12.7*24

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QDDC-1000-26500-30-30-S	1~26.5	30	30±0.8	1.2	12	1.6	SMA	78*12.7*24
QDDC-1000-40000-20-10-K	1~40	20	10±0.9	3.7	11	1.7	2.92mm	140*12.7*15.9
QDDC-1000-40000-20-20-K	1~40	20	20±1	1.7	10	1.7	2.92mm	78*12.7*24
QDDC-1000-40000-20-30-K	1~40	20	30±1	1.6	10	1.7	2.92mm	78*12.7*24
QDDC-1000-67000-12-10-V	1~67	12	10±2	5.7	8	2	1.85mm	140*12.7*15.9
QDDC-1270-1305-1K-30-7-1	1.27~1.305	1000	30±1	0.15	30	1.15	7/16 DIN	80*55.9*55.9
QDDC-1900-2200-50-10-NS	1.9~2.2	50	10±1	1.5	20	1.2	SMA, N	140*20*20
QDDC-2000-2800-K3-40-NS	2~2.8	300	40±1	0.25	20	1.3	N&SMA	53*55*22
QDDC-2000-4000-10-10-S	2~4	10	10±1	0.8	18	1.2	SMA	86*15*11
QDDC-2000-4000-K1-30-S	2~4	100	30±1.5	0.4	20	1.25	SMA	44*26*22
QDDC-2000-4000-K3-20-NS	2~4	300	20±1	0.4	18	1.35	N&SMA	44*26*22
QDDC-2000-4000-K5-50-NS	2~4	500	50±1.5	0.4	20	1.25	SMA, N	44*26*22
QDDC-2000-5000-K4-45-NS	2~5	400	45±1.5	0.5	10	1.5	N&SMA	58*40*25
QDDC-2000-6000-K4-40-8S	2~6	400	40±1	0.3	15	1.5	SMA&Mini-DIN	70*28*25.4
QDDC-2000-6000-K6-30-NS	2~6	600	30±0.7	0.4	15	1.3	N&SMA	94.7*25.4*47.5
QDDC-2000-6000-K6-40-NS	2~6	600	40±0.7	0.4	15	1.3	N&SMA	94.7*25.4*47.5
QDDC-2000-8000-K15-40-NS	2~8	150	40±1	0.3	12	1.7	N&SMA	52*38*25.4
QDDC-2000-8000-K25-30-NS	2~8	250	30±0.8	0.4	14	1.4	N&SMA	94.7*25.4*47.5
QDDC-2000-8000-K25-40-NS	2~8	250	40±0.8	0.4	14	1.4	N&SMA	94.7*25.4*47.5
QDDC-2000-8000-K6-30-NS	2~8	600	30±0.8	0.4	14	1.4	N&SMA	94.7*25.4*47.5
QDDC-2000-8000-K6-40-NS	2~8	600	40±0.8	0.4	14	1.4	N&SMA	94.7*25.4*47.5
QDDC-2000-18000-20-40-S	2~18	20	40±1.5	2	7	1.7	SMA	86*18*11
QDDC-2000-18000-30-10-S	2~18	30	10±0.7	2.4	14	1.5	SMA	90*12.7*15.9
QDDC-2000-18000-30-20-S	2~18	30	20±0.7	0.9	14	1.5	SMA	60*12.7*24
QDDC-2000-18000-30-30-S	2~18	30	30±0.7	0.8	14	1.5	SMA	60*12.7*24
QDDC-2000-18000-K25-30-NS	2~18	250	30±1	0.6	10	1.6	N&SMA	94.7*25.4*47.5
QDDC-2000-18000-K25-40-NS	2~18	250	40±1	0.6	10	1.6	N&SMA	94.7*25.4*47.5
QDDC-2000-18000-K4-30-NS	2~18	400	30±1	0.6	10	1.6	N&SMA	94.7*25.4*47.5
QDDC-2000-18000-K4-40-NS	2~18	400	40±1	0.6	10	1.6	N&SMA	94.7*25.4*47.5
QDDC-2000-26500-30-10-S	2~26.5	30	10±0.8	2.8	14	1.6	SMA	90*12.7*15.9
QDDC-2000-26500-30-20-S	2~26.5	30	20±0.8	1.2	12	1.6	SMA	60*12.7*24
QDDC-2000-26500-30-30-S	2~26.5	30	30±0.8	1.1	12	1.6	SMA	60*12.7*24
QDDC-2000-40000-20-10-K	2~40	20	10±0.9	3.3	11	1.7	2.92mm	90*12.7*15.9
QDDC-2000-40000-20-20-K	2~40	20	20±1	1.5	10	1.7	2.92mm	60*12.7*24
QDDC-2000-40000-20-30-K	2~40	20	30±1	1.4	10	1.7	2.92mm	60*12.7*24
QDDC-2700-3100-K2-40-N	2.7~3.1	200	40±2	0.3	18	1.3	N	44*26*22
QDDC-4000-6000-10-10-S	4~6	10	10±1	0.8	18	1.2	SMA	86*15*11
QDDC-4000-6000-K4-40-NS	4~6	400	40±1.5	0.6	10	1.3	N&SMA	50*50*22.6
QDDC-6000-8000-30-30-S	6~8	30	30±1	0.5	16	1.3	SMA	66*15*11
QDDC-6000-10000-K12-40-NS	6~10	120	40±1	0.3	15	1.4	N&SMA	44*28*25.4
QDDC-6000-18000-30-10-S	6~18	30	10±0.7	2	14	1.5	SMA	63.5*12.7*15.9
QDDC-6000-18000-30-20-S	6~18	30	20±0.7	0.8	14	1.5	SMA	44*12.7*24
QDDC-6000-18000-30-30-S	6~18	30	30±0.7	0.7	14	1.5	SMA	44*12.7*24
QDDC-6000-18000-60-20-S	6~18	60	20±1	1	12	1.5	SMA	66*15*11.09
QDDC-6000-18000-80-35-S	6~18	80	35±1	0.5	10	1.5	SMA	39*21*15
QDDC-6000-18000-K25-30-NS	6~18	250	30±1	0.5	10	1.6	N&SMA	83.7*25.4*47.5
QDDC-6000-18000-K25-40-NS-1	6~18	250	40±1	0.5	10	1.7	N&SMA	38*37*25.4
QDDC-6000-18000-K4-30-NS	6~18	400	30±1	0.5	10	1.6	N&SMA	83.7*25.4*47.5
QDDC-6000-18000-K4-40-NS	6~18	400	40±1	0.5	10	1.6	N&SMA	83.7*25.4*47.5
QDDC-6000-26500-30-10-S	6~26.5	30	10±0.8	2.4	14	1.6	SMA	63.5*12.7*15.9
QDDC-6000-26500-30-20-S	6~26.5	30	20±0.8	1.1	12	1.6	SMA	44*12.7*24
QDDC-6000-26500-30-30-S	6~26.5	30	30±0.8	1	12	1.6	SMA	44*12.7*24
QDDC-6000-40000-20-10-K	6~40	20	10±0.9	2.8	10	1.7	2.92mm	63.5*12.7*15.9
QDDC-6000-40000-20-20-K	6~40	20	20±1	1.4	10	1.7	2.92mm	44*12.7*24
QDDC-6000-40000-20-30-K	6~40	20	30±1	1.3	10	1.7	2.92mm	44*12.7*24
QDDC-8000-12400-K1-40-N	8~12.4	100	40±1	0.4	10	1.4	N	60*30*24
QDDC-18000-26500-30-10-S	18~26.5	30	10±1.5	2.4	10	1.6	SMA	56*15*11
QDDC-18000-26500-30-20-S	18~26.5	30	20±0.5	1	12	1.6	SMA	44*12.7*24
QDDC-18000-26500-30-30-S	18~26.5	30	30±0.5	0.9	12	1.6	SMA	44*12.7*24
QDDC-18000-40000-20-10-K	18~40	20	10±0.7	2.7	10	1.7	2.92mm	44*12.7*24
QDDC-18000-40000-20-30-K	18~40	20	30±0.7	1.3	10	1.7	2.92mm	44*12.7*24
QDDC-18000-40000-30-20-K	18~40	30	20±2	2.2	10	1.7	2.92mm	56*15*11

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QDDC-18000-67000-12-30-V	18~67	12	30±1.2	2.8	7	2	1.85mm	63.5*12.7*15.9
QDDC-24000-44000-20-10-2	24~44	20	10±0.7	2.8	10	1.7	2.4mm	63.5*12.7*15.9
QDDC-24000-44000-20-20-2	24~44	20	20±0.7	1.4	10	1.7	2.4mm	44*12.7*24
QDDC-24000-44000-20-30-2	24~44	20	30±0.7	1.3	10	1.7	2.4mm	44*12.7*24
QDDC-26500-40000-20-10-K	26.5~40	20	10±0.5	2.7	10	1.7	2.92mm	63.5*12.7*15.9
QDDC-26500-40000-20-20-K	26.5~40	20	20±0.7	1.3	10	1.7	2.92mm	44*12.7*24
QDDC-26500-40000-20-30-K	26.5~40	20	30±0.7	1.2	10	1.7	2.92mm	44*12.7*24

Bi-Directional Couplers

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size* (mm)
QBDC-2000-4000-K4-40-NS	2~4	400	40±1.5	0.5	10	1.3	N&SMA	50*50*22.6
QBDC-4000-6000-K4-40-NS	4~6	400	40±1.5	0.6	10	1.3	N&SMA	50*50*22.6

90 Degree Hybrid Couplers

90 degree hybrid coupler, with signal energy obtained by coupling being half of the total energy (3dB), is similar to a 2-way power divider. The energy from the coupling port and the output port accounts for half respectively. Different from a 2-way power divider, whose signals at the two output ports are identical (the phase difference is 0 degree, so the power divider is also called 0 degree power divider), the signal phase difference between the coupling port and the output port of the 3dB hybrid coupler is 90 degrees.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifiers, Broadcast, Laboratory Test, Telecom.

How To Order:

QHCV-W-X-Y-Z

Phase Difference: 90° - 9, 180° - 8
Start Frequency (MHz)
Stop Frequency (MHz)
Connector Type
Power (W)

Examples: To order a 90 degree hybrid coupler, 225~400MHz, power 50W, SMA, specify QHC9-225-400-50-S.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Bal. (±dB/°, Max.)	VSWR (max.)	Connector	Size* (mm)
QHC9-1.6-30-K25-N	0.0016 ~ 0.03	250	0.2	25	0.1/3	1.3	N	-
QHC9-50-250-1-S	0.05 ~ 0.25	1	1.6	15	0.5/6	1.5	SMA	31.75*31.95*19.05
QHC9-80-1000-K2-N	0.08 ~ 1	200	0.9	16	1.3/8	1.35	N	155*85.8*29
QHC9-100-140-10-S	0.1 ~ 0.14	10	0.5	18	0.7/5	1.3	SMA	67*60*13
QDHC9-100-520-K2	0.1 ~ 0.52	200	0.45	17	0.75/5	1.3	-	83.82*38.1*7.32
QDHC9-100-520-K8	0.1 ~ 0.52	800	0.42	16	0.75/5	1.3	-	83.82*38.1*9.32
QHC9-106-176-K2-N	0.106 ~ 0.176	200	0.25	20	0.45/2	1.25	N	162.56*30.48*20.32
QHC9-225-400-50-S	0.225~0.4	50	0.3	20	0.5/4	1.25	SMA	66*32*13
QHC9-225-400-K2-N	0.225~0.4	200	0.25	20	0.6/2	1.25	N	104.65*30.48*20.32
QHC9-300-6000-30-S	0.3~6	30	2.2	16	1.1/7	1.5	SMA	280*35*14
QHC9-400-500-10-S	0.4~0.5	10	0.5	20	0.5/3	1.3	SMA	62*26*13
QHC9-400-650-K8-N	0.4~0.65	800	0.5	16	0.6/5	1.35	N	410*102*36
QHC9-500-1000-50-S	0.5~1	50	0.3	22	0.5/2	1.25	SMA	84.5*13*11
QHC9-500-3000-10-S	0.5~3	10	1.1	20	0.9/7	1.3	SMA	153*25.4*11
QHC9-500-6000-30-S	0.5~6	30	1.4	19	0.5/5	1.4	SMA	215.9*35.6*12.7
QHC9-500-9000-30-S	0.5~9	30	1.8	19	0.7/5	1.4	SMA	215.9*35.6*12.7
QHC9-600-18000-30-S	0.6~18	30	3	16	1/8	1.4	SMA	173.7*35.6*12.7
QSHC9-800-4200-K1	0.8~4.2	100	0.8	15	1/8	1.5	SMD	45.72*10.16*4.6
QHC9-1000-3000-K1-S	1~3	100	0.6	18	0.3/3	1.35	SMA	-
QSHC9-1000-3000-K4	1~3	400	0.2	20	1/4	1.25	SMD	25.4*12.7*5.5
QHC9-1000-4000-30-S	1~4	30	0.6	20	0.6/6	1.25	SMA	76*22*11
QHC9-1000-7000-20-S	1~7	20	0.9	18	0.4/4	1.4	SMA	74*25*11
QHC9-1000-18000-30-S	1~18	30	1.5	16	1/9	1.8	SMA	74*25*11
QHC9-1500-2500-30-S	1.5~2.5	30	0.5	20	0.6/5	1.3	SMA	105*22*11
QHC9-2000-2300-K1-S	2~2.3	100	0.35	20	0.2/3	1.2	SMA	45*40*10
QHC9-2000-8000-20-S	2~8	20	0.8	18	0.8/8	1.4	SMA	60*25*11
QHC9-2000-8000-60	2~8	60	0.8	17	1/8	1.5	PIN	60*25*11
QHC9-2000-18000-30-S	2~18	30	2.2	18	1/5	1.45	SMA	60*25*11
QHC9-2000-26500-30-S	2~26.5	30	2	10	1/10	1.8	SMA	37*18*11
QHC9-2000-40000-30-K	2~40	30	2.8	10	1.5/12	2	2.92mm	37*18*11
QHC9-2400-2500-K5-N	2.4~2.5	500	0.6	18	0.3/2.5	1.4	N	100*50*20
QHC9-2500-8000-30-S	2.5~8	30	0.7	15	0.6/7	1.6	SMA	60*41*11
QHC9-2700-3500-K5-N	2.7~3.5	500	0.5	16	0.8/8	1.5	N	117.2*38*25
QHC9-3200-4000-30-S	3.2~4	30	0.5	20	0.6/2	1.3	SMA	45*17*11
QHC9-4000-18000-K1-S	4~18	100	1.4	15	0.9/6	1.7	SMA	27*16*11
QHC9-5700-5900-30-S	5.7~5.9	30	0.5	23	0.3/3	1.25	SMA	40*15*12
QHC9-6000-18000-30-S	6~18	30	1	16	0.7/8	1.5	SMA	22*34.7*11
QHC9-6000-26500-30-S	6~26.5	30	1.8	15	0.7/8	1.6	SMA	43.7*21.9*12.7
QHC9-6000-40000-20-K	6~40	20	2	14	1.2/10	1.8	2.92mm	43.7*21.9*12.7
QHC9-6000-50000-20-2	6~50	20	2.7	12	1.2/12	1.9	2.4mm	43.7*21.9*12.7
QHC9-18000-40000-30-K	18~40	30	2.2	12	0.7/10	1.8	2.92mm	25.4*16*11
QHC9-18000-50000-20-2	18~50	20	2.6	13	0.9/12	1.9	2.4mm	43.7*21.9*12.7
QHC9-24000-44000-20-2	24~44	20	2.3	14	0.7/10	1.8	2.4mm	43.7*21.9*12.7
QHC9-26000-40000-30-K	26~40	30	2.2	12	0.7/10	1.8	2.92mm	25.4*16*11

180 Degree Hybrid Couplers

180 degree hybrid coupler, is similar to a 2-way power divider when a signal comes in from the 0 degree port (∑) and out as two identical signals (with the same amplitude and phase) from port 1 and port 2. There's no signal coming out of the 180 degree port (△). It is similar to a 2-way combiner when two identical signals come in from port 1 and port 2 respectively and out as one synthesized signal from port 0 (Σ). There's no signal coming out of the 180 degree port (△).

When a signal comes in from the 180 degree port (△), two signals of the same amplitude and with 180 degree phase difference will come out from port 1 and port 2, and at the time, there is no signal coming out from the 0 degree port (Σ). When two signals of the same amplitude and with 180 degree phase difference come in from port 1 and port 2 respectively, they will become a synthesized signal coming out from the 180 degree port (△) . There is no signal coming out from the 0 degree port (Σ).

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifiers, Broadcast, Laboratory Test, Telecom.

How To Order:

QHCV-W-X-Y-Z

- Phase Difference: 90° - 9, 180° - 8
- Start Frequency (MHz)
- Stop Frequency (MHz)
- Connector Type
- Power (W)

Examples: To order a 180 degree hybrid coupler 225~400MHz, power 30W, SMA, specify QHC8-225-400-30-S.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Bal. (±dB/°, Max.)	VSWR (max.)	Connector	Size* (mm)
QHC8-1.6-30-K25-N	0.0016~0.03	250	0.2	25	0.1/3	1.3	N	-
QHC8-1.6-30-2K5-N	0.0016~0.03	2500	0.2	25	0.1/3	1.2	N	-
QHC8-106-176-30-S	0.106~0.176	30	1.2	18	0.8/10	1.4	SMA	13*120*152
QHC8-225-400-30-S	0.225~0.4	30	1	18	0.8/10	1.4	SMA	13*96*96
QHC8-350-1000-K25-N	0.35~1	250	0.5	20	0.5/7	1.3	N	150*100*24
QHC8-500-6000-30-S	0.5~6	30	3.6	18	1/9	1.5	SMA	254*71.1*12.7
QHC8-500-8000-30-S	0.5~8	30	4	18	1/9	1.5	SMA	254*71.1*12.7
QHC8-1000-3000-2	1~3	2	1	18	0.7/10	1.4	SMD	67*46*10
QHC8-1000-3000-K1-S	1~3	100	0.7	18	0.3/5	1.35	SMA	-
QHC8-1000-6000-30-S	1~6	30	1.8	18	0.7/7	1.4	SMA	150*44.5*12.7
QHC8-1000-12400-30-S	1~12.4	30	2.6	17	0.7/8	1.5	SMA	150*44.5*12.7
QHC8-1000-18000-30-S	1~18	30	3.3	16	1/10	1.6	SMA	150*44.5*12.7
QHC8-1200-2700-10-S	1.2~2.7	10	0.8	20	0.8/10	1.35	SMA	65*60*14
QHC8-1500-2500-10-S	1.5~2.5	10	0.5	20	0.6/5	1.4	SMA	64*60*13
QHC8-2000-6000-30-S	2~6	30	1.5	18	0.9/11	1.35	SMA	82*36*11
QHC8-2000-18000-30-S	2~18	30	2	16	0.7/9	1.6	SMA	77.2*34.3*12.7
QHC8-2000-26500-30-S	2~26.5	30	3.2	15	1/12	1.7	SMA	77.2*34.3*12.7
QHC8-2700-3400-30-S	2.7~3.4	30	0.4	20	0.3/5	1.35	SMA	48*53*13
QHC8-3200-4000-10-S	3.2~4	10	0.5	18	0.6/5	1.4	SMA	45*60*13
QHC8-4000-10000-30-S	4~10	30	1.5	18	0.8/10	1.5	SMA	48*36*11
QHC8-6000-12400-30-S	6~12.4	30	1.8	15	-/12	1.6	SMA	49*36*11
QHC8-6000-18000-30-S	6~18	30	1.5	16	0.6/8	1.6	SMA	40*40.6*12.7
QHC8-6000-26500-30-S	6~26.5	30	2	15	0.8/10	1.7	SMA	40*40.6*12.7
QHC8-6000-40000-20-K	6~40	20	3	14	1.2/12	1.8	2.92mm	40*40.6*12.7
QHC8-6000-50000-20-2	6~50	20	3.8	12	1.5/15	2	2.4mm	40*40.6*12.7
QHC8-18000-26500-30-S	18~26.5	30	1.9	15	0.7/9	1.7	SMA	40*40.6*12.7
QHC8-18000-40000-20-K	18~40	20	2.9	15	1.2/12	1.8	2.92mm	40*40.6*12.7
QHC8-18000-50000-20-2	18~50	20	3.8	12	1.4/14	1.9	2.4mm	40*40.6*12.7
QHC8-24000-44000-20-2	24~44	20	3.4	14	1.1/11	1.8	2.4mm	40*40.6*12.7
QHC8-26500-40000-20-K	26.5~40	20	2.9	15	1/10	1.7	2.92mm	40*40.6*12.7
QHC8-26500-50000-20-2	26.5~50	20	3.8	12	1.4/13	1.9	2.4mm	40*40.6*12.7

DC Blocks

DC Block is used to block the DC signal for RF circuits. Qualwave supplies DC blocks working up to 67GHz.

Features: Broadband, Low VSWR, High Withstand Voltage; **Applications:** Telecom, Instrumentation, Laboratory Test, Radar.

How To Order:

QDB-X-Y-Z

- X: Start Frequency (MHz)
- Y: Stop Frequency (MHz)
- Z: Connector Type

Examples: To order a DC block, 10M~26.5GHz, 3.5mm female to 3.5mm female, specify QDB-10-26500-3F3F.

Standard DC Blocks

Part Number	Frequency (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Voltage (V, max.)	Connector	Size (mm)
QDB-0.7-67000-VVF-A QDB-0.7-67000-VVF-B	700K~67	1	1.9	16 50	1.85mm male-1.85mm female	Φ8*26.9
QDB-10-3000-SFSF	0.01~3	0.6	1.3	50	SMA female-SMA female	22*20*12
QDB-10-110000-11F	0.01~110	2	2	50	1.0mm male-1.0mm female	L: 31.3
QDB-10-67000-VVF	0.01~67	0.4	1.65	25	1.85mm male-1.85mm female	L: 18.3
QDB-10-50000-22F	0.01~50	0.8	1.3	50	2.4mm male-2.4mm female	Φ9*26.8
QDB-10-50000-22					2.4mm male-2.4mm male	Φ9*25.6
QDB-10-50000-2F2F					2.4mm female-2.4mm female	Φ9*28
QDB-10-40000-KKF	0.01~40	0.8	1.3	50	2.92mm male-2.92mm female	Φ9*25
QDB-10-40000-KK					2.92mm male-2.92mm male	Φ9*26
QDB-10-40000-KFKF					2.92mm female-2.92mm female	Φ9*24
QDB-10-26500-SSF	0.01~26.5	0.8	1.3	50	SMA male-SMA female	Φ9*30
QDB-10-26500-SS					SMA male-SMA male	Φ9*31.1
QDB-10-26500-SFSF					SMA female-SMA female	Φ9*28.8
QDB-10-26500-33F					3.5mm male-3.5mm female	Φ9*33.8
QDB-10-26500-33					3.5mm male-3.5mm male	Φ9*34.9
QDB-10-26500-3F3F					3.5mm female-3.5mm female	Φ9*32.7
QDB-10-18000-NNF	0.01~18	0.6	1.25	50	N male-N female	L: 42.6
QDB-10-18000-NN					N male-N male	L: 43.4
QDB-10-18000-NFNF					N female-N female	L: 41.8

High Voltage DC Blocks

Part Number	Frequency (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Voltage (V, max.)	Connector	Size (mm)
QDB-100-18000-K1-NNF	0.1~18	0.8	1.4	100	N male-N female	Φ20*61
QDB-100-18000-K1-SSF	0.1~18	0.8	1.45	100	SMA male-SMA female	Φ11*40
QDB-100-6000-3K-44F	0.1~6	0.3	1.25	3000	4.3-10 male-4.3-10 female	Φ26*60
QDB-100-6000-3K-77F	0.1~6	0.3	1.25	3000	7/16 male-7/16 female	Φ32*80
QDB-80-6000-3K-NNF	0.08~6	0.35	1.25	3000	N male-N female	Φ38*78.5
QDB-80-3000-3K-NNF-A	0.08~3	0.25	1.15	3000	N male-N female	Φ38*76
QDB-80-3000-3K-NNF-B						Φ38*78.2
QDB-50-8000-3K-NNF	0.05~8	0.5	1.5	3000	N male-N female	Φ38*78.5

Detectors

The detector is a component that detects useful information in the fluctuating signals. It can identify the existence and change of wave, oscillation and signal. The technical specifications of detector mainly include frequency range, sensitivity and linearity. The RF signal frequency range may be the first parameter to consider when selecting a detector. The speed of the detector must be fast enough to extract the amplitude of the signal. It must also be able to provide a constant response for a wide frequency range. Sensitivity refers to the ability of the detector to return useful information when a very low input signal is added to the input. It is the change of the detector output signal relative to the input signal, in mV/mW; it can be simply understood as how much mV the output voltage of the detector will change when the power of the input signal changes (increases or decreases) by 1mW, and the greater the change, the more sensitive it will be. The positive detector is the detector whose output voltage is positive, and the negative detector is the detector whose output voltage is negative.

Qualwave supplies coaxial and waveguide detectors working from 10MHz to 110GHz.

Features: Broadband, High Sensitivity; **Applications:** Telecom, Instrumentation, Laboratory Test, Radar.

How To Order Coaxial Detectors:

QD-W-X-Y-Z

Start Frequency (MHz)
Stop Frequency (MHz)
Connector Type
Polarity: Positive - P, Negative

Examples: To order a coaxial detector, 0.01~18GHz, positive, SMA male to SMA female, specify QD-10-18000-P-S.

How To Order Waveguide Detectors:

QWD-X

Waveguide Size

Examples: To order a waveguide detector, WR-10, specify QWD-10.

Coaxial Detectors

Part Number	Frequency (GHz)	Sensitivity (mV/mW)	Flatness (± dB, max.)	VSWR (max.)	Polarity	Input Power (dBm, max.)	Input Connector	Output Connector	Size (mm)
QD-10-4000-P-S QD-10-4000-N-S	0.01~4	500	0.3	1.2	Positive Negative	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-4000-P-SB QD-10-4000-N-SB	0.01~4	500	0.3	1.2	Positive Negative	20	SMA (m)	BNC (f)	-
QD-10-4000-P-N QD-10-4000-N-N	0.01~4	500	0.3	1.2	Positive Negative	20	N (m)	N (f)	Φ20*67
QD-10-4000-P-NS QD-10-4000-N-NS	0.01~4	500	0.3	1.2	Positive Negative	20	N (m)	SMA (f)	-
QD-10-4000-P-NB QD-10-4000-N-NB	0.01~4	500	0.3	1.2	Positive Negative	20	N (m)	BNC (f)	-
QD-10-8000-P-S QD-10-8000-N-S	0.01~8	500	0.3	1.4	Positive Negative	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-8000-P-SB QD-10-8000-N-SB	0.01~8	500	0.3	1.4	Positive Negative	20	SMA (m)	BNC (f)	-
QD-10-8000-P-N QD-10-8000-N-N	0.01~8	500	0.3	1.4	Positive Negative	20	N (m)	N (f)	Φ20*67
QD-10-8000-P-NS QD-10-8000-N-NS	0.01~8	500	0.3	1.4	Positive Negative	20	N (m)	SMA (f)	-
QD-10-8000-P-NB QD-10-8000-N-NB	0.01~8	500	0.3	1.4	Positive Negative	20	N (m)	BNC (f)	-
QD-10-12000-P-S QD-10-12000-N-S	0.01~12	500	0.5	1.5	Positive Negative	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-12000-P-SB QD-10-12000-N-SB	0.01~12	500	0.5	1.5	Positive Negative	20	SMA (m)	BNC (f)	-
QD-10-12000-P-N QD-10-12000-N-N	0.01~12	500	0.5	1.8	Positive Negative	20	N (m)	N (f)	Φ20*67
QD-10-12000-P-NS QD-10-12000-N-NS	0.01~12	500	0.5	1.8	Positive Negative	20	N (m)	SMA (f)	-
QD-10-12000-P-NB QD-10-12000-N-NB	0.01~12	500	0.5	1.8	Positive Negative	20	N (m)	BNC (f)	-
QD-10-18000-P-S QD-10-18000-N-S	0.01~18	500	0.6	1.8	Positive Negative	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-18000-P-SB QD-10-18000-N-SB	0.01~18	500	0.6	1.8	Positive Negative	20	SMA (m)	BNC (f)	-
QD-10-18000-P-N QD-10-18000-N-N	0.01~18	500	0.6	2.2	Positive Negative	20	N (m)	N (f)	Φ20*67
QD-10-18000-P-NS QD-10-18000-N-NS	0.01~18	500	0.6	2.2	Positive Negative	20	N (m)	SMA (f)	-
QD-10-18000-P-NB QD-10-18000-N-NB	0.01~18	500	0.6	2.2	Positive Negative	20	N (m)	BNC (f)	-
QD-10-26500-P-S QD-10-26500-N-S	0.01~26.5	180	1.5	2.2	Positive Negative	20	SMA (m)	SMA (f)	Φ9.2*36

Part Number	Frequency (GHz)	Sensitivity (mV/mW)	Flatness (± dB, max.)	VSWR (max.)	Polarity	Input Power (dBm, max.)	Input Connector	Output Connector	Size (mm)
QD-10-26500-P-SB QD-10-26500-N-SB	0.01~26.5	180	1.5	2.2	Positive Negative	20	SMA (m)	BNC (f)	-
QD-10-40000-P-K QD-10-40000-N-K	0.01~40	150	3.5	2.2	Positive Negative	20	2.92mm (f)	2.92mm (f)	29.8*9.8*9.8

Waveguide Detectors

Part Number	Frequency (GHz)	Sensitivity (mV/ mW)	Flatness (± dB, max.)	VSWR (max.)	Polarity	Input Power (dBm, max.)	Input Connector	Output Connector	Size (mm)
QWD-10	75~110	100	2.2	-	Negative	20	WR-10	SMA (f)	26.5*32.2
QWD-15	50~75	200	2	-	Negative	20	WR-15	SMA (f)	30*17.6*38.6
QWD-19	40~60	300	1.8	-	Negative	20	WR-19	SMA (f)	L: 24.5
QWD-22	33~50	300	1.8	-	Negative	20	WR-22	SMA (f)	30*42.5*17
QWD-28	26.5~40	300	1.5	-	Negative	20	WR-28	SMA (f)	34.5*33.7*19

Equalizers

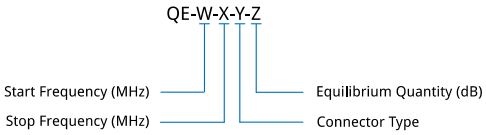
Qualwave supplies equalizers working from 50MHz to 40GHz.

Equalizers

Equalizer is a component used to compensate for the negative gain slope in the frequency response of various RF systems. Unlike a standard attenuator with a flat frequency response, an equalizer is a unique attenuator whose insertion loss varies linearly with frequency at a certain slope. For designers applying to broadband scenarios, this characteristic plays an important role in compensating for frequency response.

Features: Low VSWR, Small Size; **Applications:** Amplifier, Laboratory Test, Instrumentation.

How To Order:



Examples: To order an equalizer, DC~3GHz, SMA female, equilibrium quantity 1dB, specify QE-0-3000-S-1.

Part Number	Frequency (GHz)	Equilibrium Quantity (dB)	Insertion Loss (dB, max.)	VSWR (typ.)	Connector	Size (mm)
QE-0-3000-S-1	DC-3	1	1.5	1.04	SMA	16*20*10
QE-500-8000-S-6	0.5-8	6	1.5	1.5	SMA	-
QE-500-20000-S-12	0.5-20	12	2	1.8	SMA	-
QE-700-1300-S-3.5	0.7-1.3	3.5	1	1.6	SMA	26*20*12
QE-750-18000-S-25	0.75-18	25	8.5	2	SMA	20*16.8*10
QE-1000-1600-S-2	1-1.6	2	1	1.6	SMA	-
QE-1000-2000-S-3	1-2	3	1	1.5	SMA	-
QE-1000-4000-S-4	1-4	4	1	1.6	SMA	-
QE-1000-6000-S-10	1-6	10	2	2	SMA	-
QE-2000-4000-S-6	2-4	6	2	1.6	SMA	-
QE-2000-6000-S-3	2-6	3	1	1.6	SMA	-
QE-2000-18000-S-8	2-18	8	2	1.8	SMA	-
QE-2000-18000-S-10	2-18	10	3	2	SMA	-
QE-3000-6000-S-3	3-6	3	1	1.6	SMA	-
QE-4000-8000-S-4	4-8	4	2	1.8	SMA	-
QE-5000-15000-S-4	5-15	4	2	1.8	SMA	-
QE-6000-18000-S-3	6-18	3	2	1.8	SMA	-
QE-6000-18000-S-15	6-18	15	3	1.6	SMA	30*20*10
QE-7500-18000-S-25	7.5-18	25	8.5	2	SMA	20*16.8*10
QE-8000-18000-S-4	8-18	4	2	1.8	SMA	-
QE-8000-18000-S-19.5	8-18	19.5	4	1.8	SMA	30*20*12
QE-18000-40000-K-2	18-40	2	3	2	2.92mm	-
QE-18000-40000-K-4	18-40	4	3	2	2.92mm	-
QE-18000-40000-K-6	18-40	6	3	2	2.92mm	-
QE-26000-40000-K-4	26-40	4	4	2	2.92mm	-

Filters/Multiplexers

The filter is a kind of frequency selection component, which can pass specific frequency and greatly attenuate other frequency. By using filter, the interference noise can be filtered or the spectrum can be analyzed.

Qualwave supplies high stopband rejection filters with a wide frequency range up to 110GHz.

Low Pass Filters

Low pass filter, allows signals below the cut-off frequency to pass, but signals above the cut-off frequency cannot pass.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Telecom, Laboratory Test, Receivers, Instrumentation.

How To Order:

QLF-X-Y

Stop Frequency of Passband (MHz)

Stopband Attenuation (dB)

Examples: To order a low pass filter, passband DC~300MHz, stopband attenuation 60dB@0.643~3GHz, specify QLF-300-60.

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Stopband Attenuation (dB)	Connector	Size* (mm)
QLF-2-15-40-1	2M~15M	2.5	1.5	40@17-200MHz	SMA	50.29*17.02*7.92
QLF-2-15-40-2	2M~15M	2	1.5	40@19.5-200MHz	SMA	50.29*17.02*7.92
QLF-2-15-40-3	2M~15M	1	1.4	40@30-200MHz	SMA	50.29*17.02*7.92
QLF-45-20	DC~0.045	1	1.7	20@0.07~0.09GHz 40@0.09~1.6GHz	SMA	50.29*17.02*7.92
QLF-55-35	DC~0.055	0.8	1.5	35@0.07~0.2GHz	SMA	30*18*13
QLF-200-2400-60	0.2~2.4	5	1.5	60@3.6GHz	SMA	35*12*8
QLF-300-60	DC~0.3	0.5	1.5	60@0.643~3GHz	SMA	40*18*13
QLF-330-60	DC~0.33	0.5	1.3	60@0.643~3GHz	SMA	40*18*13
QLF-480-30	DC~0.48	3	1.5	30@0.53~3GHz	SMA	35*12*8
QLF-1000-40	DC~1	0.77	1.3	40@1.9~5GHz	SMA	36.32*Φ10.41
QLF-1400-50	DC~1.4	2	1.6	50(@2GHz max.)	SMA	35*12*8
QLF-2186-30	1.5~2.186	2	1.6	10@2.2775GHz 30@2.37~3GHz	SMA	35*12*10
QLF-2186-30-P	1.5~2.186	2	1.6	10@2.2775GHz 30@2.37~3GHz	Φ0.8mm Pin	35*12*7
QLF-2250-40	DC~2.25	0.82	1.2	40@3~5GHz	SMA	36.32*Φ10.41
QLF-2500-65	DC~2.5	3	2	65@3-13GHz	N	-
QLF-2700-90	DC~2.7	2	2	90@4.5-8.4GHz	SMA	-
QLF-3000-40	DC~3	0.72	1.2	40@4.78~7.5GHz	SMA	36.32*Φ10.41
QLF-4000-50	DC~4	0.8	1.5	50@8GHz	SMA	-
QLF-4000-60	DC~4	1.5	1.3	60@4.5~12.3GHz	SMA	35*23*10
QLF-4400-40	DC~4.4	0.73	1.2	40@6.28~9.8GHz	SMA	36.32*Φ10.41
QLF-4800-35	DC~4.8	1.5	2	35@6GHz	SMA	-
QLF-5000-40	DC~5	0.68	1.2	40@7.05-10GHz	SMA	36.32*Φ10.41
QLF-6000-20	0.5~6	2	1.8	20@6.5GHz	SMA	37*24*11
QLF-6000-60	DC~6	1.5	1.3	60@6.7~15.5GHz	SMA	29*22*10
QLF-6500-60	DC~6.5	1.5	1.3	60@7.27~15.3GHz	SMA	31*23*10
QLF-7000-50	DC~7	1.5	1.3	50@7.77~15.5GHz	SMA	31*23*10
QLF-8000-40	DC~8	2	2	40@9~25GHz	SMA	56.44*15*12.9
QLF-8000-50	DC~8	1.5	1.4	50@8.8~16.2GHz	SMA	30*22*10
QLF-9000-50	DC~9	1.5	1.4	50@9.8~17GHz	SMA	29*21*10
QLF-9000-60	DC~9	1	1.6	60@14~17GHz	SMA	29*22*12
QLF-10000-40	DC~10	2	2	40@13-18GHz	SMA	-
QLF-10000-50	DC~10	1.5	1.4	50@10.9~18.5GHz	SMA	28*21*10
QLF-11000-35	DC~11	2	2	35@12GHz	2.92mm	-
QLF-11000-50	DC~11	1.5	1.5	50@12.1~19GHz	SMA	24*19*10
QLF-11500-45	DC~11.5	2	2	45@12.8-13.3GHz	2.92mm	-
QLF-11500-40	DC~11.5	2	1.5	40@12.3-13.3GHz	2.92mm	-
QLF-12000-40	DC~12	2	2	40@13.5-25GHz	SMA	-
QLF-13000-40	DC~13	1.5	2	40@15-25GHz	2.92mm	-
QLF-13000-50	DC~13	2	1.5	50@14.1~21GHz	SMA	22*17.5*10
QLF-15000-40	DC~15	2	2	40@18-23GHz	2.92mm	-
QLF-15000-50	DC~15	2.5	1.5	50@16~22.3GHz	SMA	21*17*10

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Stopband Attenuation (dB)	Connector	Size* (mm)
QLF-16000-40	DC~16	2	2	40@18-25GHz	SMA	-
QLF-18000-40	DC~18	2	2	40@20-38GHz	2.92mm	67*14*10
QLF-18000-50	DC~18	3	1.6	50@19.1-26GHz	SMA	18*17*10
QLF-20000-60	DC~20	1	2	60@23~40GHz	2.92mm	65*14*10
QLF-25000-40	DC~25	2	2	40@28-30GHz	2.92mm	58*13*11
QLF-28000-30	DC~28	2	2	30@30-38GHz	2.4mm	57*16*10

Band Pass Filters

The band pass filter allows signals in a specific frequency range to pass. It refers to a filter that can pass a certain frequency, but attenuate the frequency in other ranges to a very low level, which is opposite to the concept of band reject filter.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Telecom, Laboratory Test, Receivers, Instrumentation.

How To Order:

QBF-X-Y-Z

Start Frequency of Passband (MHz)

Stop Frequency of Passband (MHz)

Stopband Attenuation (dB)

Examples: To order a band pass filter, passband 40~100MHz, stopband attenuation 30dB@DC~0.03GHz & 30dB@0.118~0.4GHz, specify QBF-40-100-30.

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Stopband Attenuation (dB)	Stopband Attenuation (dB)	Connector	Size* (mm)
QBF-40-100-30	0.04~0.1	1.5	1.5	30@DC~0.03GHz	30@0.118~0.4GHz	SMA	50*18*13
QBF-50-150-45	0.05~0.15	1	1.45	45@DC~0.035GHz	45@0.21~1GHz	SMA	40*18*13
QBF-50-250-30	0.05~0.25	1.2	1.8	30@DC~0.04GHz	30@0.31~0.5GHz	SMA	50*18*13
QBF-64-76-35	0.064~0.076	3	1.35	35@50MHz	35@90MHz	SMA	35*12*8
QBF-110-170-30	0.11~0.17	2	1.5	30@DC~0.08GHz	30@0.2~0.4GHz	SMA	50*18*13
QBF-136-174-60	0.136~0.174	2	1.5	60@350~530MHz	-	SMA	30*12*10
QBF-150-230-45	0.15~0.23	2	1.5	45@DC~120MHz	45@280~500MHz	SMA	40*18*13
QBF-150-350-50	0.15~0.35	1.5	1.5	50@DC~125MHz	50@430~1000MHz	SMA	35*12*8
QBF-245-355-25	0.245~0.235	2	1.5	38@DC~0.2GHz	25@0.4~0.9GHz	SMA	50*18*13
QBF-273-277-50	0.273~0.277	2.5	2	50@DC~0.26GHz	50@0.29~1GHz	SMD	3.8*3.8*1.5
QBF-300-600-30	0.3~0.6	1.8	1.5	30@0.26GHz	30@0.65GHz	SMA	40.4*12*10
QBF-310-443-50	0.31~0.443	1	1.5	50@DC~0.1765GHz	50@0.5765~1.5GHz	SMA	80*30*20
QBF-350-550-60	0.35~0.55	2	1.5	60@136~174MHz	-	SMA	30*12*10
QBF-400-700-50	0.4~0.7	2.5	1.5	50@DC~0.3GHz	50@0.85~1GHz	2.92mm	50*18*13
QBF-430-450-30	0.43~0.45	1	1.22	30@DC~0.425GHz	30@0.455~1GHz	SMA	181*93*65
QBF-497.5-502.5-40	0.4975~0.5025	1.2	1.22	40@DC~0.493GHz	40@0.507~1GHz	SMA	181*93*60
QBF-585-615-60	0.585~0.615	0.5	2	60@0.45GHz	60@0.75GHz	SMA	-
QBF-606-678-40	0.606~0.678	1.5	1.5	40@DC~0.5GHz	30@0.825~3GHz	SMA	40.4*12*10
QBF-710-730-45	0.71~0.73	2.5	1.3	45@0.695GHz	50@0.735GHz	SMA	-
QBF-710-730-65	0.71~0.73	2	1.4	65@DC~650MHz	65@790~1500mHz	SMA	116*80*20
QBF-800-1200-45	0.8~1.2	1	1.8	45@0.55GHz	45@1.45GHz	SMA	62*48*13
QBF-800-1600-40	0.8~1.6	5	2.2	40@0.75GHz	40@1.65GHz	SMA	-
QBF-818-918-45	0.818~0.918	3	1.5	45@0.668GHz	45@1.068GHz	SMA	35*12*8
QBF-818-1000-45	0.818~1	3	1.5	45@0.709GHz	45@1.109GHz	SMA	35*12*8
QBF-859-959-45	0.859~0.959	3	1.5	45@0.709GHz	45@1.109GHz	SMA	35*12*8
QBF-860-880-60	0.86~0.88	1.5	1.5	60@DC~0.8375GHz	60@0.9025~2GHz	SMA	97*67*40
QBF-890-910-60	0.89~0.91	1.5	1.5	60@DC~0.8675GHz	60@0.9325~2GHz	SMA	97*67*40
QBF-920-940-60	0.92~0.94	1.5	1.5	60@DC~0.8975GHz	60@0.9625~2GHz	SMA	97*67*40
QBF-955-2155-60	0.955~2.155	1.5	1.8	60@ DC~450MHz	60@ 2750~5000MHz	SMA	40*18*13
QBF-960-1240-30	0.96~1.24	1.5	1.5	30@860MHz	30@1350MHz	SMA	35*12*8
QBF-1000-1700-50	1~1.7	1.7	1.7	50@DC~0.9GHz	60@1.8~2.2GHz	2.92mm	100*67*11
QBF-1000-1800-30	1~1.8	2	1.5	30@0.8&2.2GHz	60@0.1&3GHz	SMA	30*12*10
QBF-1050-2250-30	1.05~2.25	5	1.5	30@0.3GHz	60@3GHz	SMA	40.4*12*10
QBF-1100-1600-50	1.1~1.6	2.5	1.5	50@0.9GHz	50@1.8GHz	SMA	35*12*8
QBF-1200-1400-50	1.2~1.4	0.3	1.35	50@0.8GHz	50@2~6GHz	N	-
QBF-1330-1430-45	1.33~1.43	0.5	1.25	45@DC~1.08GHz	45@1.68~4.5GHz	SMA	70*26*36
QBF-1390-1410-80	1.39~1.41	2	1.3	80@1.35GHz	80@1.47GHz	SMA	81*56*28
QBF-1400-1800-60	1.4~1.8	2	1.5	60@DC~1.3GHz	60@1.9~3GHz	SMA	126*59*11
QBF-1400-1850-60	1.4~1.85	2	1.5	60@DC~1.3GHz	60@1.9~3GHz	SMA	110*52*11
QBF-1500-1600-45	1.5~1.6	3	1.5	45@1.35GHz	45@1.75GHz	SMA	35*12*8
QBF-1518-1553-40	1.518~1.553	3	1.5	40@0.1GHz	40@0.5355&2.5355GHz	Pin	20*10*7
QBF-1640-1675-40	1.64~1.675	3	1.5	40@0.1GHz	40@0.6575&2.6575GHz	Pin	20*10*7
QBF-1650-3150-35	1.65~3.15	1.5	1.45	35@DC~1250MHz	35@3550~5000MHz	SMA	50*18*13
QBF-1800-2200-45	1.8~2.2	1.2	1.5	45@1.55GHz	45@2.45GHz	SMA	68*27*13
QBF-1950-2050-40	1.95~2.05	2	1.5	40@1.9GHz	40@2.1GHz	SMA	-
QBF-1980-2010-80	1.98~2.01	1.5	1.5	80@DC~1.82GHz	80@2.17~2.2GHz	SMA	78*54*24
QBF-2000-3000-50	2~3	1	1.5	50@DC~1.78GHz	50@3.22~5GHz	SMA	80*43*11

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Stopband Attenuation (dB)	Stopband Attenuation (dB)	Connector	Size* (mm)
QBF-2000-3800-50	2~3.8	1.7	1.7	50@DC~1.7GHz	50@4.1~5GHz	2.92mm	78*41*11
QBF-2000-4000-60	2~4	1	1.6	60@1.5GHz	60@4.5GHz	SMA	51*11*10
QBF-2037.5-2272.5-50	2.0375~2.2725	2	1.16	80@DC~1.96& 2.35~5GHz	50@1.96~2& 2.31~2.35GHz	SMA	200*24*24
QBF-2025-2085-40	2.025~2.085	1	1.3	40@2.2~2.3GHz	-	SMA	50*50*20
QBF-2200-2400-30	2.2~2.4	1	1.5	40@DC~2.1GHz	30@2.5~4.5GHz	SMA	45*28*9
QBF-2200-2400-30-N	2.2~2.4	2.2	1.5	40@DC~2.1GHz	30@2.5~4.5GHz	N	63.5*25.4*25.4
QBF-2200-2400-60	2.2~2.4	1	1.22	60@DC~2.1GHz	60@2.5~6GHz	SMA	130*23*27
QBF-2025-2120-50	2.025~2.12	2	1.3	50@1.95GHz	50@2.2~2.3GHz	SMA	75*52*21
QBF-2200-2800-30	2.2~2.8	1	2	30@2GHz	30@3GHz	SMA	-
QBF-2240-2280-30	2.24~2.28	1.1	1.25	30@2.22~2.3GHz	-	SMA&N	76*53*22
QBF-2300-2500-45	2.3~2.5	3	1.5	45@2.05GHz	45@2.75GHz	SMA	35*12*8
QBF-2400-2500-35	2.4~2.5	1.5	1.5	35@DC~2.2GHz	35@2.7~5GHz	SMA	52*27*10
QBF-2400-2500-50	2.4~2.5	1	1.3	50@DC~2.05GHz	50@2.85~5GHz	SMA	70*21*21
QBF-2400-3600-30	2.4~3.6	1	1.5	30@2GHz	30@4GHz	SMA	-
QBF-2483.55-2499.95-40	2.48355~2.49995	1	1.25	60@DC~2.39175& 2.59175~6.5GHz	40@2.39175~2.44175& 2.54175~2.59175GHz	SMA	130*28*25
QBF-2500-2700-30	2.5~2.7	1.3	1.25	30@DC~2.45GHz	40@2.75~6GHz	SMA	180*27*29
QBF-2526.5-2579.5-40	2.5265~2.5795	1	1.5	40@2.3GHz	40@2.7GHz	SMA	66.1*48.3*17.8
QBF-2573.5-2626.5-40	2.5735~2.6265	0.8	1.3	40@2.5435GHz	40@2.6565GHz	SMA	94*65*25
QBF-2613.5-2666.5-40	2.6135~2.6665	0.8	1.3	40@2.5835GHz	40@2.6965GHz	SMA	94*65*25
QBF-2700-3300-60	2.7~3.3	1.8	1.22	60@DC~2.6GHz	60@3.4~7GHz	SMA	170*19*24
QBF-2700-3500-60	2.7~3.5	0.9	1.7	60@2.4GHz	60@3.8GHz	SMA	93*30*12
QBF-2900-3600-50	2.9~3.6	1	1.22	50@DC~2.57GHz	50@3.85~7GHz	SMA	110*19*19.5
QBF-3000-4300-50	3~4.3	1	1.5	50@DC~2.5GHz	50@5~7GHz	SMA	70*30*9
QBF-3400-3600-30	3.4~3.6	1.5	1.25	30@DC~3.35GHz	30@3.65~8GHz	SMA	180*27*26
QBF-3800-6800-60	3.8~6.8	1	1.7	60@DC~2.92GHz	60@8.16~9GHz	SMA	60*25*9
QBF-4000-6000-70	4~6	2	2	70@DC~3.6GHz	60@6.38~8GHz	SMA	55*16*8
QBF-4000-6000-40	4~6	1	1.5	40@3.4GHz	40@7GHz	SMA	-
QBF-4300-8200-50	4.3~8.2	1.5	1.7	50@DC~3.7GHz	50@8.8~10GHz	2.92mm	81*25*10
QBF-4950-5050-40	4.95~5.05	1.5	1.25	80@DC~4.7& 5.3~17GHz	40@4.7~4.85& 5.15~5.3GHz	SMA	70*16*12
QBF-4960-4980-70	4.96~4.98	0.8	1.25	70@DC~4.27& 5.67~14GHz	50@4.27~4.57& 5.37~5.67GHz	SMA	60*20*12
QBF-5000-6000-35	5~6	1.5	1.5	35@DC~4.6GHz	35@6.4~10GHz	SMA	50*14*9
QBF-5000-6000-35-1	5~6	1.8	1.8	35@DC~4.9GHz	35@6.1~12GHz	SMA	65*16*9
QBF-5000-6000-45	5~6	1.5	1.5	45@DC~4GHz	45@6.6~13GHz	SMA	39*15.5*8
QBF-5600-6000-60	5.6~6	0.9	1.5	60@5.05GHz	60@6.15GHz	SMA	106*18*11
QBF-5640-5660-50	5.64~5.66	0.6	1.3	50@DC~5GHz	50@6.3~18GHz	SMA	60*17*11
QBF-5645-5646-13	5.645~5.646	2.2	1.3	13@DC~5.6355GHz	13@5.6555~10GHz	SMA	140*38*18
QBF-5650.5-5651.5-13	5.6505~5.6515	3	1.3	13@DC~5.641GHz	13@5.661~8GHz	SMA	140*38*18
QBF-5652.5-5653.5-13	5.6525~5.6535	3	1.3	13@DC~5.643GHz	3@5.663~8GHz	SMA	140*38*18
QBF-5700-5900-45	5.7~5.9	1.8	1.5	45@5.5GHz	45@6.1GHz	SMA	39*15.5*8
QBF-5841-6249-50	5.841~6.249	1	1.5	50@DC~4.85GHz	50@7.15~15GHz	SMA	30*13*8
QBF-5900-7150-70	5.9~7.15	0.6	1.25	70@DC~5.08GHz	70@7.77~19GHz	SMA	70*16*11
QBF-6000-8192-20	6~8.192	3	1.8	20@5.7GHz	20@8.5GHz	SMA	79*17*8.5
QBF-6800-7800-40	6.8~7.8	2	1.5	40@6.2GHz	40@8.4GHz	SMA	48*17*8
QBF-6800-9800-60	6.8~9.8	1	1.5	60@DC~5.32GHz	60@11.76~15GHz	SMA	45*19*7
QBF-6867.2-7500-30	6.8672~7.5	2	1.5	10@6.5925GHz	30@5~6.3288GHz	Pin	27.8*14.5*7
QBF-7000-7400-40	7~7.4	1.2	1.5	40@DC~6.76GHz	40@7.64~10GHz	SMA	60*32*11
QBF-7300-8300-40	7.3~8.3	2	1.5	40@6.7GHz	40@9GHz	SMA	49*16*8
QBF-7400-12600-40	7.4~12.6	1.5	1.6	40@DC~6GHz	40@14~18GHz	SMA	52*15*10
QBF-7650-8350-50	7.65~8.35	3	1.5	50@7.15GHz	50@8.5GHz	SMA	80*13*9
QBF-7715-8695-80	7.715~8.695	3	1.5	80@7.5GHz	80@8.91GHz	SMA	50*25*12
QBF-8000-11000-45	8~11	0.65	1.8	45@5GHz	45@16~22GHz	SMA	40.8*14*9
QBF-8000-12000-30	8~12	1	1.8	45@7GHz	30@13~20GHz	SMA	81.2*17*15
QBF-8150-8250-40	8.15~8.25	3	1.5	40@8.1GHz	40@8.3GHz	SMA	-
QBF-8150-9090-50	8.15~9.09	0.6	1.16	80@DC~6.44& 10.8~18GHz	50@6.44~7.24& 10~10.8GHz	SMA	80*17*12
QBF-8192-16384-20	8.192~16.384	3	1.8	20@7.1GHz	20@17.5GHz	SMA	52*14.5*11.6
QBF-8250-9250-50	8.25~9.25	2.5	1.5	50@DC~7.75GHz	50@9.75~18GHz	SMA	38*13*6
QBF-8400-8500-90	8.4~8.5	1.9	1.25	90@DC~8100MHz	90@8800~22000MHz	SMA	70*16*12

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Stopband Attenuation (dB)	Stopband Attenuation (dB)	Connector	Size* (mm)
QBF-8400-9600-30	8.4~9.6	2	1.5	30@DC~8GHz	30@10~18GHz	SMA	64*13*9
QBF-8500-9500-40	8.5~9.5	2	1.5	40@7.6GHz	40@10.3GHz	SMA	50*15*8
QBF-8500-16500-50	8.5~16.5	1.5	1.8	50@DC~7.2GHz	50@17.8~19GHz	2.92mm	67*22*9
QBF-8700-12800-35	8.7~12.8	0.5	1.5	25@8GHz	35@14GHz	SMA	54.85*15.6*11
QBF-9000-10000-40	9~10	2	1.5	40@8.3GHz	40@10.6GHz	SMA	51*14*8
QBF-9000-11700-30	9~11.7	1	1.25	45@DC~8.1& 12.3~12.6GHz	30@8.1~8.4& 12.6~25GHz	SMA	70*16*12
QBF-9000-14000-40	9~14	1.5	1.8	40@DC~8GHz	40@15~23GHz	SMA	60*14.5*9.5
QBF-9250-10750-60	9.25~10.75	1.2	1.7	60@8.9GHz	60@11.1GHz	SMA	102*14*11
QBF-9400-10600-30	9.4~10.6	1.5	1.5	30@9GHz	30@11GHz	SMA	89.3*19*18
QBF-9800-12800-60	9.8~12.8	1	1.22	60@DC~7.54GHz	60@15.26~22GHz	SMA	70*17*12
QBF-10000-10500-45	10~10.5	1	1.5	45@9.5GHz	45@11GHz	SMA	25*15*8.5
QBF-10000-12000-40	10~12	1.5	1.6	40@9.5GHz	40@12.5GHz	SMA	38*12*7
QBF-10200-10600-30	10.2~10.6	1.5	1.5	30@10GHz	30@10.8GHz	SMA	59*13*10
QBF-10200-10800-30	10.2~10.8	1.5	1.5	30@10GHz	30@11GHz	SMA	80.73*17*19
QBF-10200-12300-90	10.2~12.3	1	1.5	90@DC~7.5GHz	90@15.52~20GHz	SMA	54*15*9
QBF-10425-10575-30	10.425~10.575	0.6	1.3	30@10.2GHz	30@10.8GHz	SMA	50.5*17*11.5
QBF-11487-12000-30	11.487~12	2	1.5	10@11.0275GHz	30@9~10.5864GHz	Pin	25.8*13*7
QBF-12000-18000-50	12~18	1	1.2	50@8.2GHz	50@20.8GHz	SMA	-
QBF-12700-13300-40	12.7~13.3	1.5	1.5	40@12.3GHz	40@13.7GHz	SMA	-
QBF-12800-15800-60	12.8~15.8	1	1.22	60@DC~9.85GHz	60@18.96~23GHz	SMA	60*16*12
QBF-14000-18000-75	14~18	0.7	1.8	75@12GHz	75@20GHz	SMA	58*13*9
QBF-14700-15300-40	14.7~15.3	1.3	1.5	40@DC~14.46GHz	40@15.54~18GHz	SMA	48*27*9
QBF-15000-16000-40	15~16	2	1.5	40@DC~14.5GHz	40@16.5~18GHz	SMA	71*13*7.5
QBF-15900-16500-40	15.9~16.5	1.3	1.5	40@DC~15.66GHz	40@16.74~18GHz	SMA	48*27*9
QBF-16000-16200-40	16~16.2	1.5	1.5	40@DC~15.76GHz	40@16.44~18GHz	SMA	37*27*9
QBF-16384-24576-20	16.384~24.576	3	1.8	20@15GHz	20@26GHz	SMA	54*13*7.7
QBF-18000-20000-30	18~20	2	1.5	30@DC~17.2GHz	30@20.8~30GHz	2.92mm	51*13*7.5
QBF-18000-23000-50	18~23	1	1.3	50@DC~17GHz	50@24~36GHz	SMA	60*16*12.5
QBF-18000-25000-80	18~25	1.5	1.8	80@DC~14GHz	85@29~35GHz	2.92mm	48*13*7
QBF-18000-26500-60	18~26.5	2	1.8	60@DC~15GHz	60@29.5~37GHz	2.92mm	59.5*16*11
QBF-20600-25000-60	20.6~25	2	1.8	60@18.8GHz	60@26.8GHz	2.92mm	48.3*16*7
QBF-21000-28000-50	21~28	1	1.6	65@DC~19GHz	50@30~35GHz	2.92mm	65.5*16*11
QBF-21500-22500-70	21.5~22.5	2	1.3	70@DC~20.9GHz	70@23.1~40GHz	SMA	70*16*9
QBF-23000-26500-60	23~26.5	1.5	1.8	60@DC~21.3GHz	60@28.5~40GHz	2.92mm	51.2*16*10.5
QBF-23000-30000-85	23~30	1.5	1.5	85@19GHz	85@34GHz	2.92mm	50*17*10
QBF-24000-26000-35	24~26	2	1.5	35@DC~23GHz	35@27~40GHz	2.92mm	45.5*16*11
QBF-24000-27800-60	24~27.8	2	1.5	60@DC~22.4GHz	60@30~40GHz	2.92mm	67.1*17*11
QBF-24000-29500-10	24~29.5	2	1.5	10@23GHz	10@30.5GHz	2.92mm	49.7*16*11
QBF-24000-33000-60	24~33	2	1.8	60@DC~21GHz	60@37~40GHz	2.92mm	51.5*16*11
QBF-24000-34000-40	24~34	1.5	1.8	40@DC~20GHz	40@37~55GHz	2.92mm	35*13*7
QBF-24750-27750-66	24.75~27.75	1	1.4	70@23.83GHz	66@28.67GHz	2.92mm	52*15*8
QBF-25500-29500-60	25.5~29.5	1.5	1.8	60@DC~23.5GHz	60@31.5~40GHz	2.92mm	50.4*16*10.5
QBF-26000-27000-60	26~27	1	1.6	60@25GHz	60@28GHz	2.92mm	66.5*16*10
QBF-26000-28000-60	26~28	2	1.5	60@DC~23GHz	60@31~40GHz	2.92mm	47.4*16*11
QBF-26300-26900-40	26.3~26.9	0.6	1.5	60@24GHz	40@30GHz	2.92mm	35*13*8
QBF-26300-29700-60	26.3~29.7	2	1.5	60@DC~24.8GHz	60@32~40GHz	2.92mm	71.5*17*11
QBF-26400-33000-60	26.4~33	2	1.8	60@DC~24GHz	60@37~40GHz	2.92mm	59.5*16*11
QBF-27485-31315-50	27.485~31.315	2	1.5	60@26GHz	50@32.3GHz	2.92mm	70.4*17*11
QBF-27500-28500-60	27.5~28.5	1	1.6	60@26.6GHz	60@29.5GHz	2.92mm	56.3*14*7
QBF-27500-31000-40	27.5-31	1.5	2	40@26.8GHz	60@31.9GHz	2.92mm	-
QBF-27700-28300-60	27.7~28.3	1.2	1.6	60@DC~25.7GHz	60@30.3~36GHz	2.92mm	40*14*13
QBF-29500-30500-45	29.5~30.5	1.7	1.3	70@DC~28.5& 31.5~48GHz	45@28.5~29& 31~31.5GHz	2.92mm	50.4*16*10.5
QBF-32500-33500-60	32.5~33.5	1	1.6	60@31.5GHz	60@34.5GHz	2.92mm	56*16*9
QBF-32600-36360-50	32.6~36.36	1.2	1.25	80@DC~30.78& 38.18~47GHz	50@47~50GHz	2.92mm	60*16*12
QBF-33000-40000-85	33-40	1	1.5	85@30GHz	85@43GHz	2.92mm	-
QBF-33500-36500-50	33.5~36.5	3	2	50@DC~30.5GHz	50@39.5~50GHz	2.92mm	27*12*5
QBF-34000-36000-50	34~36	3	2	50@DC~31GHz	50@39~50GHz	2.92mm	27*12*5
QBF-34500-34600-50	34.5~34.6	3.4	1.3	50@DC~34.05GHz	50@35.05~43GHz	2.92mm	40*16*11
QBF-36800-40200-58	36.8~40.2	2	1.5	58@DC~35.2GHz	58@42~67GHz	2.92mm	21.4*14.6*9.8

The sizes in the following table do not include connectors.

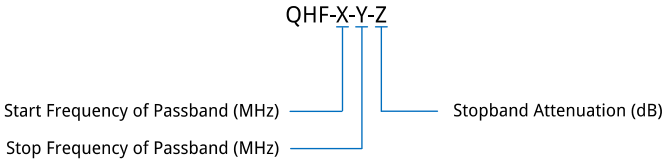
Part Number	Passband (GHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Stopband Attenuation (dB)	Stopband Attenuation (dB)	Connector	Size* (mm)
QBF-38250-38750-30	38.25~38.75	3.49	1.5	30@37.95GHz	30@39.05GHz	2.92mm	76*14*9.7
QBF-39700-40300-60	39.7~40.3	1.5	1.6	60@DC~37.7GHz	60@42.3~50GHz	2.92mm	57*14*10
QBF-43500-45500-50	43.5~45.5	3	2	50@42.8GHz	50@46.2GHz	2.4mm	-
QBF-43500-49500-20	43.5~49.5	1.5	1.6	20@41.5GHz	20@51.5GHz	2.4mm	22.43*18.6*9.8
QBF-46000-52000-50	46~52	2	1.5	70@30~40GHz	50@DC~21GHz	2.4mm	50.06*13*9
QBF-58000-62000-35	58~62	1	1.5	35@55GHz	35@65GHz	1.85mm	-

High Pass Filters

High pass filter, allowing signals higher than the cut-off frequency to pass. It is a combined component of capacitors, inductors and resistors that allows signal above a certain frequency to pass, but greatly reject signal below the frequency.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Telecom, Laboratory Test, Receivers, Instrumentation.

How To Order:



Examples: To order a high pass filter, passband 0.38~1G, stopband attenuation 30dB@DC~0.35GHz, specify QHF-380-1000-30.

The sizes in the following table do not include connectors.

Part Number	Passband (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Stopband Attenuation (dB)	Connector	Size* (mm)
QHF-380-1000-30	0.38~1	2.5	1.7	30@DC~0.35GHz	SMA	30*18*13
QHF-1300-7000-40	1.3~7	2	2	40@0.915GHz	SMA	-
QHF-1500-9000-60	1.5~9	3	2	60@1GHz	SMA	-
QHF-2000-13000-40	2~13	3	2	40@1.5GHz	N	-
QHF-2500-18000-60	2.5~18	3	2	60@1.76GHz	SMA	-
QHF-2800-15000-40	2.8~15	2	2	40@1.99GHz	SMA	-
QHF-3000-13000-65	3~13	3	2	65@2.5GHz	N	-
QHF-3000-18000-55	3~18	2	1.5	70@DC~2.6GHz&55@2.6~2.7GHz	SMA	44*29*10
QHF-3500-18000-20	3.5~18	1	1.8	20@DC~3.2GHz	SMA	34*32*10
QHF-4000-10000-50	4~10	1.5	2	50@1.3GHz	SMA	-
QHF-4000-15000-40	4~15	2	2	40@2.7GHz	SMA	-
QHF-4000-18000-15	4~18	3	2	15@3GHz	SMA	-
QHF-4000-21000-20	4~21	2.5	2	20@3GHz	SMA	-
QHF-5480-18000-50	5.48~18	0.9	2	50@DC~3.5GHz	SMA	31*24*11
QHF-6000-15000-40	6~15	2	2	40@3.9GHz	SMA	-
QHF-7000-24000-60	7~24	2	1.5	60@DC~6.3GHz	SMA	30*21*10
QHF-7500-24500-60	7.5~24.5	2	1.5	60@DC~6.77GHz	SMA	30*21*10
QHF-10000-18000-50	10~18	1.5	2	50@1.3GHz	SMA	-
QHF-11000-42000-60	11~42	3.5	2.2	60@DC~10GHz	2.92mm	122*15*15
QHF-18000-40000-35	18~40	2	2.3	35@17.5GHz	2.92mm	-
QHF-22000-40000-70	22~40	3	2	70@18GHz	2.92mm	-
QHF-26500-40000-60	26.5~40	3	2	60@3~19GHz	2.92mm	-
QHF-33000-60000-40	33~60	2	2	40@30GHz	1.85mm	23.35*16*6

Band Reject Filters

Band reject filter, which rejects signals in a specific frequency range.

Features: Broadband, High Power, Low Insertion Loss; **Applications:** Telecom, Laboratory Test, Receivers, Instrumentation.

How To Order:

QRF-X-Y-Z

- X: Start Frequency of Stopband (MHz)
- Y: Stop Frequency of Stopband (MHz)
- Z: Stopband Attenuation (dB)

Examples: To order a band reject filter, stopband 600-700MHz, stopband attenuation 45dB, specify QRF-600-700-45.

The sizes in the following table do not include connectors.

Part Number	Stopband (MHz)	Stopband Attenuation (dB)	Passband (MHz)	Passband (MHz)	Insertion Loss (dB, Max.)	VSWR (max.)	Connector	Size* (mm)
QRF-600-700-45	600~700	45	DC~500	800~2500	2	1.8	SMA	40.4*12*10
QRF-703-748-50	703~748	50	DC~683	768~4000	2	2	N	284*68*36
QRF-758-803-40	758~803	40	DC~743	818~3000	2.5	2	SMA	244*70*36
QRF-791-821-60	791~821	60	DC~781	831~2500	3	-	N	-
QRF-815-880-45	815~880	45	DC~780	920~1500	2.5	-	SMA	-
QRF-824-849-40	824~849	40	DC~814	859~3500	2	-	N	-
QRF-880-915-30	880~915	30	DC~870	925~2500	2	1.5	SMA	265*90*28
QRF-880-915-40	880~915	40	DC~865	930~2700	2	1.5	SMA	265*90*28
QRF-930-960-55	930~960	55	DC~910	975~3000	3	2	SMA	245*65.8*36
QRF-1240-1260-50	1240~1260	50	DC~1230	1270~4000	2	2	SMA	-
QRF-1350-1450-50	1350~1450	50	DC~1300	1500~2000	1	2	SMA	-
QRF-1447-1467-60	1447~1467	60	DC~1422	1492~5000	3	2	N	-
QRF-1550-1610-60	1550~1610	60	100~400	2200~2300	1	2	N	-
QRF-1710-1785-40	1710~1785	40	DC~1690	1800~3500	2	2	N	-
QRF-1785-1805-40	1785~1805	40	DC~1755	1815~5200	2	2	N	225*63*22
QRF-1805-1880-60	1805~1880	60	DC~1780	1905~5200	2 typ.	1.5 typ.	SMA	248*45*21
QRF-1805-1925-60	1805~1925	60	DC~1755	1975~5000	2	1.5	SMA	209*51*22
QRF-1850-1910-40	1850~1910	40	DC~1830	1930~3500	2	2	N	-
QRF-1880-1920-65	1880~1920	65	DC~1855	1945~2500	3	2	SMA	-
QRF-2000-2300-50	2000~2300	50	DC~1900	2400~5100	1.5	1.8	SMA	209*47*22
QRF-2110-2170-60	2110~2170	60	DC~2070	2210~6000	3	2	SMA	165*31*27
QRF-2300-2400-60	2300~2400	60	DC~2234	2480~4000	2.5	2	SMA	-
QRF-2300-2675-50	2300~2675	50	DC~2200	2775~6200	1.5	1.8	SMA	209*42*22
QRF-2400-2483.5-30	2400~2483.5	30	DC~2345	2538~15000	3	2	SMA	194*26*25.7
QRF-2400-2500-50	2400~2500	50	DC~2350	2550~5500	1.5	1.5	SMA	22*38*209
QRF-2496-2590-40	2496~2590	40	DC~2300	2700~4000	1.5	2	SMA	-
QRF-2500-2570-60	2500~2570	60	10~2450	2600~6000	1	2	SMA	-
QRF-2500-2690-40	2500~2690	40	DC~2481	2705~3000	3.2	3	SMA	352*43*36
QRF-2570-2620-55	2570~2620	55	DC~2555	2635~4000	2	2	SMA	285*40.4*33
QRF-2575-2615-50	2575~2615	50	DC~2570	2620~3000	5	2	N	-
QRF-2575-2625-60	2575~2625	60	DC~2550	2650~7700	2	1.5	SMA	173*42*18
QRF-2620-2690-60	2620~2690	60	DC~2570	2740~10000	2	2	SMA	236*35*24
QRF-3300-3800-50	3300~3800	50	DC~3190	3925~8500	1.2	1.7	SMA	141*30*16
QRF-3400-3600-50	3400~3600	50	DC~3300	3700~8000	2	1.7	SMA	141*39*16
QRF-3420-3700-60	3420~3700	60	DC~3270	3850~15000	2.5	2	SMA	159.6*17*17.5
QRF-4200-4400-60	4200~4400	60	DC~3800	4800~18000	2	2	SMA	78*20*14
QRF-4800-4900-55	4800~4900	60	DC~4720	4980~11000	2	1.7	SMA	141*35*16
QRF-5150-5850-50	5150~5850	50	DC~4950	6050~11500	1.5	1.7	N	141*36*18
QRF-5850-5925-50	5850~5925	50	DC~5620	6170~18000	2	3	SMA	104*22*36
QRF-5925-6425-50	5925~6425	50	DC~5700	6650~18000	2	3	SMA	120*22*28
QRF-5925-7125-50	5925~7125	50	DC~5325	7725~18000	2	3	SMA	170*22*30
QRF-6425-6525-50	6425~6525	50	DC~6300	6650~14000	2	1.7	SMA	141*30*16
QRF-6525-6875-50	6525~6875	50	DC~6350	7050~14200	2	1.7	SMA	141*30*16
QRF-6875-7125-50	6875~7125	50	DC~6700	7300~15000	2	1.7	SMA	141*30*16
QRF-14000-14500-50	14000~14500	50	13500~14000	14500~15000	2	-	2.92mm	-

Multiplexers

Multiplexers are a collective term for components of this type, including diplexers, triplexers, and quadruplers. Multiplexers have a single input port and multiple output ports. A multiplexer is a set of non overlapping filters that ensure that they are not loaded onto each other in a combined manner and that outputs are highly isolated from each other.

Qualwave supplies high stopband rejection small size multiplexers in frequency range DC-14GHz.

Features: High Stopband Rejection, Small Size; **Applications:** Telecom, Transceiver, Laboratory Test, Instrumentation.

Diplexers

The sizes in the following table do not include connectors.

Part Number	Channel 1 Frequency (GHz)	Channel 2 Frequency (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Channel 1 Rejection (dB, min.)	Channel 2 Rejection (dB, min.)	Input power (W)	Connector	Size* (mm)
QMP2-20-8000-1	0.02~0.8	0.93~8	2@0.02~0.8GHz 2.5@0.93~8GHz	2	45@0.93~8GHz @0.02~0.75GHz	45@0.02~0.8GHz @0.95~8GHz	1	SMA	-
QMP2-475-3200-1	0.475	3.2	1	1.5	50@1.4~5GHz	50@DC~0.95GHz	10	SMA	49*25*13.2
QMP2-2025-2300-1	2.025~2.12	2.2~2.3	2	1.5	-	-	-	SMA	53*53*11
QMP2-2400-5850-1	2.4~2.485	5.715~5.85	1	1.5	-	-	100	SMA	52*29*22
QMP2-4400-17650-1	4.4	17.65	2	2	40@10.3~25GHz	40@0.5~8.3GHz	5	2.92mm	39*50*10
QMP2-7145-9000-1	7.145~7.25	7.7~9	2.5	1.5	-	-	-	SMA	45*26*9
QMP2-11725-14375-1	11.725	14.375	1	1.45	50@13.75~18GHz	50@DC~12.75GHz	10	SMA	78*56*12.5

Triplexers

Part Number	Channel 1 Frequency (GHz)	Channel 2 Frequency (GHz)	Channel 3 Frequency (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Channel 1 Rejection (dB, min.)	Channel 2 Rejection (dB, min.)	Channel 3 Rejection (dB, min.)	Input power (W)	Connector
QMP3-1163-1588-1	1.163~1.19	1.214~1.241	1.562~1.588	1.5	1.3	-	-	-	50	N

Frequency Multipliers / Dividers

Frequency multiplier is a circuit that makes the frequency of the output signal equal to an integral multiple of the frequency of the input signal. If the input frequency is f1, the output frequency is f0=nf1, and the coefficient n is any positive integer, which is called the frequency multiplication times. The frequency multiplier is widely used. For example, after the transmitter uses a frequency multiplier, the main oscillator can oscillate at a lower frequency to improve the frequency stability; FM equipment uses frequency multiplier to increase frequency offset; In the phase keying communication machine, the frequency multiplier is an important component of the carrier recovery circuit.

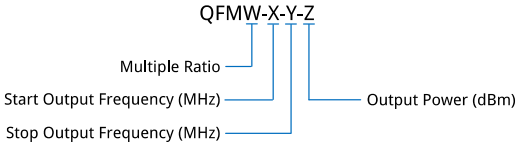
The output signal generated by the frequency divider is a part of the input signal in terms of frequency.

Qualwave supplies frequency multipliers and frequency dividers in a wide frequency range up to 110GHz. We can also customize multipliers/dividers according to customer's needs.

Features: Broadband, Low Power Consumption, Low VSWR; **Applications:** Wireless, Transceiver, Laboratory Test.

Frequency Multipliers

How To Order:



Examples: To order a frequency multiplier, input frequency 10~25GHz, output frequency 20~50GHz, 2 multiple ratio, output power 16dBm, specify QFM2-20000-50000-16.

2 Frequency Multipliers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (GHz)	Output Frequency (GHz)	Input Power (dBm, typ.)	Output Power (dBm, typ.)	Multiple Ratio	Voltage (+V, DC)	Current (mA, typ.)	VSWR	Size* (mm)
QFM2-20000-40000-26S	10~20	20~40	1~10	26	2	6~12	1000	1.8	50*30*15
QFM2-20000-50000-16	10~25	20~50	5~10	16	2	5	400	1.7	50*30*15
QFM2-22000-28000-10	11~14	22~28	3~6	10	2	5±0.5	100	-	15*25*8
QFM2-40000-60000	20~30	40~60	0	7	2	7	450	-	L=43
QFM2-50000-75000	25~37.5	50~75	22	6	2	5	0.1	-	32.7*19.1*21.1

3 Frequency Multipliers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (GHz)	Output Frequency (GHz)	Input Power (dBm, typ.)	Output Power (dBm, typ.)	Multiple Ratio	Voltage (+V, DC)	Current (mA, typ.)	VSWR	Size* (mm)
QFM3-30	0.01	0.03	10	10	3	12	100	-	45*45*16

4 Frequency Multipliers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (GHz)	Output Frequency (GHz)	Input Power (dBm, typ.)	Output Power (dBm, typ.)	Multiple Ratio	Voltage (+V, DC)	Current (mA, typ.)	VSWR	Size* (mm)
QFM4-24000-15	6	24	0~3	15	4	8	260	-	35*25*8
QFM4-28000-40000	7~10	28~40	10	13	4	5±0.5	260	-	25*25*8
QFM4-40000-65000-16S	10~16.25	40~65	0	16	4	6~12	800	1.8	50*30*15
QFM4-40000-70000-16S	10~17.5	40~70	0	16	4	6~12	800	1.8	50*30*15

6 Frequency Multipliers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (GHz)	Output Frequency (GHz)	Input Power (dBm, typ.)	Output Power (dBm, typ.)	Multiple Ratio	Voltage (+V, DC)	Current (mA, typ.)	VSWR	Size* (mm)
QFM6-75000-110000-5	12.5~18.33	75~110	17	5	6	7	130	-	35*30*22

10 Frequency Multipliers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (GHz)	Output Frequency (GHz)	Input Power (dBm, typ.)	Output Power (dBm, typ.)	Multiple Ratio	Voltage (+V, DC)	Current (mA, typ.)	Size* (mm)
QFM10-100	0.01 (0dBm)	0.1	-	3~6	10	12	260	51*51*18

Frequency Dividers

How To Order:

QFDW-X-Y

- Divide Ratio
- Start Output Frequency (MHz)
- Stop Output Frequency (MHz)

Examples: To order a frequency divider, input frequency 100MHz, 2 divide ratio, specify QFD2-100.

2 Frequency Dividers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (MHz)	Output Frequency (MHz)	Output Power (dBm)	Divide Ratio	Harmonic (dBc, max.)	Spurious (dBc, max.)	Voltage (+V, DC)	Current (mA, max.)	Connector	Size* (mm)
QFD2-100	100 (2~5dBm)	50	5~8	2	-60	-75	12	150	SMA	35*35*10

6 Frequency Dividers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (MHz)	Output Frequency (MHz)	Output Power (dBm)	Divide Ratio	Harmonic (dBc, max.)	Spurious (dBc, max.)	Voltage (+V, DC)	Current (mA, max.)	Connector	Size* (mm)
QFD6-0.001	-	1K	-	6	-	-	5	-	SMA	70*50*17

10 Frequency Dividers

The sizes in the following table do not include connectors.

Part Number	Input Frequency (MHz)	Output Frequency (MHz)	Output Power (dBm)	Divide Ratio	Harmonic (dBc, max.)	Spurious (dBc, max.)	Voltage (+V, DC)	Current (mA, max.)	Connector	Size* (mm)
QFD10-900-1100	900~1100 (-3~+3dBm)	90~110	5~8	10	-30	-75	12	200	SMA	35*35*10
QFD10-1000	1000 (-3~+3dBm)	100	5~8	10	-30	-75	12	200	SMA	35*35*10

Impedance Matching Pads

Impedance matching pads are a part of microwave electronics, mainly used on transmission lines to achieve the goal of transmitting all high-frequency microwave signals to the load point without any signal reflecting back to the source point, thereby improving energy efficiency.

Qualwave provides impedance-matching-pads for 2~50W, including SMA, N, BNC and F.

Features: Low VSWR; **Applications:** Wireless, Transmitter, Laboratory Test, Radar.

Impedance Matching Pads

How To Order:

QIMPUV-WX-YZ

- Frequency (GHz)
- Power (W)
- Connector One
- The Impedance of Connector Two (Ω)
- Connector Two
- The Impedance of Connector One (Ω)

Examples: To order a impedance matching pad, DC~1.3GHz, 2W, 50Ω N male, 75Ω N female, specify QIMP1302-N50-NF75.

Part Number	Frequency (GHz)	Power (W)	Insertion Loss (dB, max.)	VSWR (max.)	Typical Flatness (dB, max.)	50Ω Optional Connectors	75Ω Optional Connectors
QIMP1302-WX-YZ	DC~1.3	2	5.7	1.06	0.1	SMA, N, BNC	N, BNC, F
QIMP1305-WX-YZ	DC~1.3	5	5.7	1.06	0.1	SMA, N, BNC	N, BNC, F
QIMP1350-WX-YZ	DC~1.3	50	5.7	1.2	0.1	SMA, N, BNC	N, BNC, F
QIMP3002-WX-YZ	DC~3	2	5.7	1.15	0.15	SMA, N, BNC	N, BNC, F
QIMP3005-WX-YZ	DC~3	5	5.7	1.15	0.15	SMA, N, BNC	N, BNC, F
QIMP3050-WX-YZ	DC~3	50	5.7	1.25	0.15	SMA, N, BNC	N, BNC, F

Frequency Sources

Qualwave supplies a series low phase noise, high power frequency sources, including Frequency Synthesizers, PLDRO, PLVCO, PLXO, DRO, VCO, DRVCO, high power frequency source etc. The frequency range is up to 40GHz.

Frequency Synthesizers

Frequency synthesizer, also known as frequency source, its main function is to generate various forms of frequency signals required by electronic systems.

Frequency synthesizers is a high frequency stability frequency source. Qualwave supplies ultra low phase noise frequency synthesizers at frequencies up to 40GHz.

Features: High Frequency Stability, Ultra Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

Frequency Synthesizers (PXI & Module)

Part Number	Output Frequency (GHz)	Step (Hz)	Switching Speed (μS, max.)	Output Power (dBm, min.)	Output Phase Noise @1KHz (dBc/Hz)	Reference Frequency (MHz)	Control Type	Package Type	Size* (mm)
QFS-50-22600-MS-1	0.05~22.6	0.1	200	4±5	-101	100	SPI	Module	50*50*13
QFS-50-22600-MS-2	0.05~22.6	0.1	60	4±5	-101	100	SPI	Module	50*50*13
QFS-200-19000-MS	0.2~19	100	500	0±5	-97	100	SPI	Module	80*65*13
QFS-200-15000-MS-1	0.2~15	1	500	1±6	-81	100	SPI	Module	38*38*10
QFS-200-15000-MS-2	0.2~15	0.1	200	0±4	-105	100	SPI	Module	80*65*13
QFS-200-15000-MS-3	0.2~15	0.1M	200	0±4	-108	100	SPI	Module	80*65*13
QFS-200-15000-MS-4	0.2~15	0.1	500	0±4	-113	100	SPI	Module	120*120*23
QFS-200-15000-MS-4-1	0.2~15	0.1	500	0±4	-113	10	SPI	Module	120*120*23
QFS-200-14600-MS	0.2~14.6	0.1	200	0±4	-104	100	SPI	Module	80*65*13
QFS-200-20000-MU	0.2~20	0.1	200	-40~+10	-101	-	UART	Module	146.1*95*21
QFS-200-20000-XU	0.2~20	0.1	200	-40~+10	-101	-	UART	PXI	171.8*100*20.2
QFS-200-20000-MUL	0.2~20	0.1	200	-40~+10	-105	-	UART	Module	146.1*95*21
QFS-200-20000-XUL	0.2~20	0.1	200	-40~+10	-105	-	UART	PXI	171.8*100*20.2
QFS-200-40000-MU	0.2~40	0.2	200	-40~+10	-95	-	UART	Module	146.1*95*35
QFS-200-40000-XU	0.2~40	0.2	200	-40~+10	-95	-	UART	PXI	171.8*100*20.2
QFS-200-40000-MUL	0.2~40	0.2	200	-40~+10	-99	-	UART	Module	146.1*95*35
QFS-200-40000-XUL	0.2~40	0.2	200	-40~+10	-99	-	UART	PXI	171.8*100*20.2

Narrow Band Frequency Synthesizers

The sizes in the following table do not include connectors. The "X" in the part number represents the start output frequency (MHz), and the "Y" represents the stop output frequency (MHz). The output frequency only supports narrowband within the range of 1~40GHz.

Part Number	Output Frequency (GHz)	Step (Hz)	Switching Speed (μS, max.)	Output Power (dBm, min.)	Output Phase Noise @1KHz (dBc/Hz)	Reference Frequency (MHz)	Voltage (V, DC)	Current (A, typ.)	Size* (mm)
QFS-X-Y-MR	a narrow band in 1~40GHz	0.1 (1~15GHz) 0.2 (15~30GHz) 0.4 (30~40GHz)	200	10	-107@10GHz -101@20GHz -94@40GHz	100	RS232	Module	115*95*20
QFS-X-Y-MS						100	SPI		
QFS-X-Y-MR-1						10	RS232		
QFS-X-Y-MS-1						10	SPI		

Agile Frequency Synthesizers

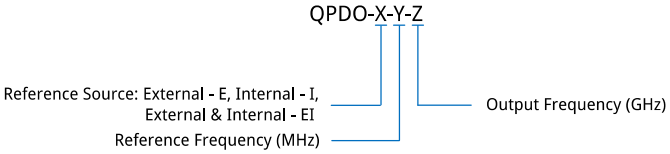
Part Number	Output Frequency (GHz)	Step (Hz)	Switching Speed (μS, max.)	Output Power (dBm, min.)	Output Phase Noise @1KHz (dBc/Hz)	Reference Frequency (MHz)	Control Type	Package Type	Size* (mm)
QAFS-1250-10000-MS	1.25~10	0.1	10	5	-85	100	SPI	Module	65*65*13
QAFS-2500-20000-MS	2.5~20	0.1	10	5	-79	100	SPI	Module	65*65*13
QAFS-1250-20000-MP	1.25~20	10k	0.5	13	-104	100	Parallel Port	Module	146.1*95*18
QAFS-1250-20000-MP-1	1.25~20	10k	0.5	13	-104	10	Parallel Port	Module	146.1*95*18

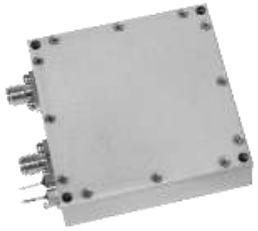
PLDRO

PLDRO, Phase Locked Dielectric Resonator Oscillator, this is a stable and reliable frequency source, which can be simply understood as adding phase locking function to DRO. The frequency stability and phase noise are better. PLDRO is a point frequency source, which can only output the frequency of one frequency point.

Features: High Frequency Stability, Ultra Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

How To Order:





Examples: To order a PLDRO, internal reference, reference frequency 100MHz, output frequency 3.95GHz, specify QPDO-I-100-3.95.

External Reference

The sizes in the following table do not include connectors.

Part Number	Output FREQ.	Phase Noise (dBc/Hz)					Ref. FREQ.	Ref. Phase Noise	Current	Size*
	(GHz)	@100Hz	@1KHz	@10KHz	@100KHz	@1MHz	(MHz)	(dBc/Hz@1KHz)	(mA, max.)	(mm)
QPDO-E-10-40.5	40.5	-65	-95	-98	-98	-110	10	-155	450	57.2*57.2*33.8
QPDO-E-10-38.5	38.5	-65	-95	-98	-98	-110	10	-155	450	57.2*57.2*33.8
QPDO-E-10-37.17	37.17	-65	-85	-85	-98	-110	10	-155	450	57.2*57.2*33.8
QPDO-E-10-36.06	36.06	-65	-85	-85	-98	-110	10	-155	450	57.2*57.2*33.8
QPDO-E-10-35	35	-65	-95	-98	-98	-115	10	-155	450	57.2*57.2*33.8
QPDO-E-100-30.2	30.2	-	-102	-110	-110	-132	100	-155	300	50.8*47.8*15.7
QPDO-E-100-30	30	-	-102	-110	-110	-132	100	-155	300	50.8*47.8*15.7
QPDO-E-100-30-1	30	-75	-93	-96	-101	-129	100	-157	350	57.2*57.2*15.7
QPDO-E-10-21	21	-70	-100	-105	-105	-120	10	-155	450	57.2*57.2*33.8
QPDO-E-100-20	20	-80	-103	-112	-112	-133	100	-155	350	57.2*57.2*15.7
QPDO-E-25-20	20	-79	-89	-99	-109	-119	25	-155	450	57.2*57.2*33.8
QPDO-E-125-19.5	19.5	-71	-83	-93	-103	-113	125	-135	450	57.2*57.2*25.4
QPDO-E-25-19.25	19.25	-75	-85	-97	-104	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-100-19.05	19.05	-75	-102	-108	-110	-130	100	-102	300	57.2*57.2*15.7
QPDO-E-25-18.75	18.75	-73	-83	-95	-105	-115	25	-155	450	57.2*57.2*33.8
QPDO-E-25-18.5	18.5	-65	-80	-93	-103	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-125-18.25	18.25	-71	-83	-93	-103	-113	125	-135	450	57.2*57.2*25.4
QPDO-E-25-18.25	18.25	-75	-85	-97	-104	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-25-18.2	18.2	-65	-80	-93	-103	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-25-18	18	-65	-80	-93	-103	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-10-18	18	-65	-85	-95	-100	-110	10	-85	550	57.2*57.2*33.8
QPDO-E-100-17.95	17.95	-75	-102	-108	-110	-130	100	-	300	57.2*57.2*15.7
QPDO-E-25-17.75	17.75	-73	-83	-95	-105	-115	25	-155	450	57.2*57.2*33.8
QPDO-E-100-17.65	17.65	-80	-104	-110	-110	-132	100	-155	350	57.2*57.2*15.7
QPDO-E-50-17.65	17.65	-80	-104	-110	-110	-132	50	-155	450	57.2*57.2*15.7
QPDO-E-25-17.65	17.65	-65	-80	-93	-103	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-25-17.25	17.25	-65	-80	-93	-103	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-25-17.25-1	17.25	-75	-85	-97	-104	-115	25	-150	450	57.2*57.2*33.8
QPDO-E-100-16.75	16.75	-75	-102	-108	-110	-130	100	-	300	57.2*57.2*15.7
QPDO-E-25-16.75	16.75	-73	-83	-95	-105	-115	25	-155	450	57.2*57.2*33.8
QPDO-E-100-15.7	15.7	-	-114	-118	-118	-130	100	-160	330	50.8*47.8*15.7
QPDO-E-135-15.66	15.66	-	-110	-114	-114	-130	135	-155	330	50.8*47.8*15.7
QPDO-E-25-14.95	14.95	-83	-94	-104	-112	-124	25	-155	450	57.2*57.2*33.8
QPDO-E-10-14.7	14.7	-	-75	-78	-	-	10	-170@10KHz	400	57.2*57.2*15.7
QPDO-E-25-14.275	14.275	-76	-86	-99	-109	-121	25	-155	450	57.2*57.2*33.8
QPDO-E-25-14.05	14.05	-71	-86	-99	-109	-121	25	-150	450	57.2*57.2*33.8
QPDO-E-25-14.025	14.025	-79	-85	-90	-102	-125	25	-158	450	57.15*57.15*12.7
QPDO-E-100-14-1	14	-85	-107	-117	-117	-135	100	-155	300	50.8*47.8*15.7
QPDO-E-25-13.8	13.8	-71	-86	-99	-109	-121	25	-150	450	57.2*57.2*33.8
QPDO-E-25-13.775	13.775	-83	-100	-108	-114	-131	25	-155	450	57.2*57.2*33.8
QPDO-E-25-13.675	13.675	-76	-86	-99	-109	-121	25	-155	450	57.2*57.2*33.8
QPDO-E-25-13.525	13.525	-71	-86	-99	-109	-121	25	-150	450	57.2*57.2*33.8
QPDO-E-25-13.45	13.45	-83	-94	-104	-112	-124	25	-155	450	57.2*57.2*33.8
QPDO-E-25-13.275	13.275	-71	-86	-99	-109	-121	25	-150	450	57.2*57.2*33.8

The sizes in the following table do not include connectors.

Part Number	Output FREQ.	Phase Noise (dBc/Hz)					Ref. FREQ.	Ref. Phase Noise	Current	Size*
	(GHz)	@100Hz	@1KHz	@10KHz	@100KHz	@1MHz	(MHz)	(dBc/Hz@1KHz)	(mA, max.)	(mm)
QPDO-E-25-13.275-1	13.275	-83	-100	-108	-114	-131	25	-155	450	57.2*57.2*33.8
QPDO-E-25-13.025	13.025	-76	-86	-99	-109	-121	25	-155	450	57.2*57.2*33.8
QPDO-E-25-12.3	12.3	-83	-94	-104	-112	-124	25	-155	450	57.2*57.2*33.8
QPDO-E-75-12.075	12.075	-77	-87	-97	-107	-117	75	-150	450	57.2*57.2*25.4
QPDO-E-25-11.95	11.95	-83	-94	-104	-112	-124	25	-155	450	57.2*57.2*33.8
QPDO-E-75-11.55	11.55	-77	-87	-97	-107	-117	75	-150	450	57.2*57.2*25.4
QPDO-E-100-11	11	-83	-105	-113	-113	-135	100	-157	350	57.2*57.2*15.7
QPDO-E-10-10.6	10.6	-88	-112	-120	-120	-140	10	-170@10KHz	550	57.2*57.2*35.3
QPDO-E-25-10.45	10.45	-79	-89	-99	-109	-119	25	-155	450	57.2*57.2*33.8
QPDO-E-100-10.1	10.1	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-10	10	-88	-113	-120	-120	-140	100	-157	300	50.8*47.8*15.7
QPDO-E-10-9.99	9.99	-85	-110	-115	-115	-134	10	-170@10KHz	600	57.2*57.2*33.8
QPDO-E-100-9.9	9.9	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-25-9.45	9.45	-79	-89	-99	-109	-119	25	-155	450	57.2*57.2*33.8
QPDO-E-100-9.2	9.2	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-9.1	9.1	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-9	9	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-8.82	8.82	-85	-108	-115	-115	-135	100	-155	350	57.2*57.2*15.7
QPDO-E-100-8.4	8.4	-92	-115	-120	-120	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-100-8.3	8.3	-90	-113	-118	-120	-140	100	-155	350	57.2*57.2*15.7
QPDO-E-100-8.14	8.14	-88	-112	-120	-120	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-100-8	8	-90	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-10-8	8	-90	-113	-120	-120	-140	10	-	600	50.8*47.8*35.7
QPDO-E-10-8-1	8	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-25-7.75	7.75	-79	-89	-99	-109	-119	25	-155	450	57.2*57.2*33.8
QPDO-E-10-7.2	7.2	-86	-109	-116	-116	-133	10	-	550	57.2*57.2*33.8
QPDO-E-100-7	7	-92	-115	-120	-120	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-10-7	7	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-6.95	6.95	-90	-110	-115	-115	-135	10	-170@10KHz	600	60.2*57.2*33.8
QPDO-E-10-6.94	6.94	-	-82	-85	-	-	10	-170@10KHz	300	57.2*57.2*15.7
QPDO-E-10-6.4	6.4	-87	-110	-117	-117	134	10	-	550	57.2*57.2*33.8
QPDO-E-10-6.3	6.3	-90	-118	-120	-120	-135	10	-170@10KHz	600	60.2*57.2*33.8
QPDO-E-25-6.25	6.25	-79	-89	-99	-109	-119	25	-155	450	57.2*57.2*33.8
QPDO-E-10-6	6	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-5.6	5.6	-88	-111	-118	-118	-135	10	-	550	57.2*57.2*33.8
QPDO-E-10-5	5	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-4.8	4.8	-89	-112	-119	-119	-136	10	-	550	57.2*57.2*33.8
QPDO-E-100-4.5	4.5	-92	-116	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-10-4.5	4.5	-92	-116	-120	-120	-140	10	-	600	50.8*47.8*35.7
QPDO-E-100-4-1	4	-88	-120	-124	-124	-140	100	-160	250	50.8*47.8*15.7
QPDO-E-10-4	4	-90	-113	-120	-120	-138	10	-	550	57.2*57.2*33.8
QPDO-E-10-4-1	4	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-3	3	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-2	2	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-10-1.6	1.6	-103	-126	-128	-133	-144	10	-170@10KHz	450	57.2*57.2*33.8
QPDO-E-100-1.1	1.1	-108	-133	-135	-135	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-100-1	1	-108	-133	-135	-135	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-10-1	1	-	-	-90	-	-	10	-	280	40*50*10
QPDO-E-10-1-1	1	-70	-95	-115	-120	-120	10	-	550	57.2*57.2*33.8
QPDO-E-100-0.9	0.9	-108	-133	-135	-135	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-10-0.9	0.9	-95	-105	-110	-120	-	10	-	280	40*50*10
QPDO-E-10-0.4	0.4	-100	-110	-110	-120	-	10	-	280	40*50*10
QPDO-E-10-0.175	0.175	-	-	-90	-	-	10	-	280	40*50*10

Internal Reference

The sizes in the following table do not include connectors.

Part Number	Output FREQ. (GHz)	Phase Noise (dBc/Hz) @100Hz	@1KHz	@10KHz	@100KHz	@1MHz	Ref. FREQ. (MHz)	Ref. Phase Noise (dBc/Hz@1KHz)	Current (mA, max.)	Size* (mm)
QPDO-I-100-38	38	-	-100	-	-	-	100	-	700(+12V)	70*57.2*17.5
QPDO-I-100-34.941	34.941	-65	-75	-80	-85	-85	100	-	800(+12V) 100(-12V)	65*80*28
QPDO-I-100-32	32	-65	-75	-80	-80	-115	100	-	580	88*65*19.5
QPDO-I-50-32	32	-65	-75	-80	-80	-115	50	-	800	65*80*28
QPDO-I-100-24	24	-65	-75	-80	-80	-115	100	-	950	65*80*18
QPDO-I-107-14	14	-85	-107	-117	-117	-140	-	-	500	50.8*47.8*35.7
QPDO-I-100-12	12	-86	-114	-117	-117	-130	100	-160	600	57.2*57.2*35.3
QPDO-I-75-11.85	11.85	-75	-105	-110	-110	-135	75	-	550	57.2*57.2*33.8
QPDO-I-105-11	11	-83	-105	-113	-115	-135	100	-	600	57.2*57.2*35.7
QPDO-I-20-9.6	9.6	-	-	-80	-	-	20	-	230	57.2*57.2*16
QPDO-I-100-9.2	9.2	-90	-118	-125	-125	-140	100	-	550	57.2*57.2*33.8
QPDO-I-100-8.111	8.111	-	-105	-115	-125	-140	100	-	450	57.2*57.2*33.8
QPDO-I-80-7.68-1	7.68	-80	-105	-120	-	-130	80	-160	700	57.2*57.2*15.6
QPDO-I-100-7.6275	7.6275	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.5375	7.5375	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.5	7.5	-85	-115	-120	-	-	100	-	560	57.2*57.2*33.8
QPDO-I-100-7.4475	7.4475	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.3575	7.3575	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-6.55	6.55	-88	-120	-126	-126	-140	100	-	600	57.2*57.2*33.8
QPDO-I-10-4.97	4.97	-	-70	-80	-100	-128	10	-	600	57.2*57.2*35.3
QPDO-I-100-4.8	4.8	-92	-118	-123	-123	-138	100	-	600	57.2*57.2*33.8
QPDO-I-100-4.1	4.1	-95	-118	-122	-122	-140	100	-	600	50.8*47.8*35.7
QPDO-I-100-3.95	3.95	-90	-124	-128	-128	-145	100	-	550	57.2*57.2*33.8
QPDO-I-100-3.9	3.9	-90	-124	-128	-128	-145	100	-	550	57.2*57.2*33.8
QPDO-I-100-3.25	3.25	-	-	-120	-	-	100	-145	560	57.2*57.2*35
QPDO-I-50-1.37	1.37	-100	-125	-128	-129	-140	50	-	600	57.2*57.2*35.3

Internal & External Reference

The sizes in the following table do not include connectors.

Part Number	Output FREQ. (GHz)	Phase Noise (dBc/Hz) @100Hz	@1KHz	@10KHz	@100KHz	@1MHz	Ref. FREQ. (MHz)	Ref. Phase Noise (dBc/Hz@1KHz)	Current (mA, max.)	Size* (mm)
QPDO-EI-10-8	8	-90	-113	-120	-120	-140	10	-	600	50.8*47.8*35.7
QPDO-EI-10-4.5	4.5	-92	-116	-120	-120	-140	10	-	600	50.8*47.8*35.7

DRO

DRO, Dielectric Resonator Oscillator, it is realized by using the characteristics of the dielectric block.

Features: High Frequency Stability, Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

How To Order:

QDO-X-Y-Z

Start Frequency (MHz)

Stop Frequency (MHz)

Output Power (dBm)

Examples: To order a DRO, 29.975~30.025GHz, output power 13dBm, specify QDO-29975-30025-13.

The sizes in the following table do not include connectors.

Part Number	Output Frequency (GHz)	Phase Noise (dBc/Hz)			FREQ. Temp. Stability (± ppm/°C)	Output Power (dBm, min.)	Harmonic (dBc, max.)	Spurious (dBc, max.)	Size* (mm)
		@10KHz	@100KHz	@1MHz					
QDO-38500-10	38.5	-75	-	-	2.5	10	-25@9.625G	-85	51*40*16
QDO-35000-18	35G±10M	-85	-105	-128	2.5	18	-25@17.5G	-80	51*40*17.2
QDO-34475-10	34.475	-85	-105	-128	2.5	10	-20	-80	51*40*17.2
QDO-29975-30025-13	29.975~30.025	-	-	-	-	13	-25	-70	84*72*28
QDO-29550-13	29.55	-83	-93	-93	2.5	13	-20	-80	51*40*17.2
QDO-29050-13	29.05	-83	-93	-93	2.5	13	-20	-80	51*40*17.2
QDO-28550-13	28.55	-83	-93	-93	2.5	13	-20	-80	51*40*17.2
QDO-25950-26050-20	25.95~26.05	-	-100	-	4	20	20	75	63.48*30.48*20.8
QDO-14250-10	14.25	-75	-110	-130	5	10	-20	-80	57.15*29.21*15.75
QDO-13434-13454-13	13.434~13.454	-75	-110	-130	5	13	-20	-80	53.3*27.9*13.2
QDO-11850-13	11.85	-100	-120	-135	5	13	-20	-80	57.15*29.21*15.75
QDO-9550-9650-20	9.55~9.65	-	-100	-	4	20	20	75	63.48*30.48*20.8
QDO-9400-10	9.4	-95	-115	-	3	10	-20	-80	50.04*27.94*18.29
QDO-9200-13	9.2	-100	-120	-135	5	13	-20	-80	57.15*29.21*15.75
QDO-8000-13	8	-105	-	-	5	13	-20	-80	54*40*17.2
QDO-7600-13	7.6	-105	-	-	5	13	-20	-80	54*40*17.2
QDO-6550-13	6.55	-100	-120	-135	5	13	-20	-80	57.15*29.21*15.75
QDO-3950-13	3.95	-100	-120	-135	5	13	-20	-80	57.15*29.21*15.75
QDO-3900-13	3.9	-100	-120	-135	5	13	-20	-80	57.15*29.21*15.75
QDO-1151.8-1152.2-13	1.1518~1.1522	-85	-120	-140	5	13	-20	-80	53.3*27.9*13.2

VCO

VCO, Voltage Controlled Oscillator, this frequency source that generates frequency is controlled by external voltage. The characteristic is that the frequency changes with the voltage and can produce multiple frequencies.

Features: High Frequency Stability; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

How To Order:

QVO-X-Y-Z

Start Frequency (MHz)

Stop Frequency (MHz)

Output Power (dBm)

Examples: To order a VCO, 9.9~10GHz, output power 30dBm, specify QVO-9900-10000-30.

The sizes in the following table do not include connectors.

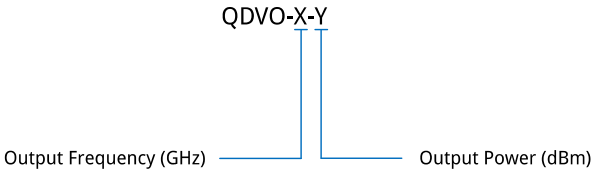
Part Number	Output FREQ. (GHz)	Electrically Adjustable BW. (MHz)	Output Power (dBm, min.)	Control Voltage (V, DC)	2nd Harmonic (dBc, max.)	Spurious (dBc, max.)	Voltage (V, DC)	Current (mA, max.)	Size* (mm)
QVO-10000-20000	10~20	100	5~10	0~18	-	-60	12~15	180	45*40*16
QVO-9990-30	9.99	-	30	-	-20	-70	12	2000	84*75*16
QVO-9900-10000-30	9.9~10	100	30	4~6	-20	-70	12	2000	84*75*16
QVO-9000-9500-13	9~9.5	500	13	5-11	-20	-70	12	500	84*75*16
QVO-800-1600-9	0.8~1.6	800	9 typ.	0.5~24	-15	-70	11.5	50	32*32*10

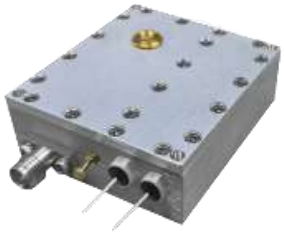
DRVCO

DRVCO, the Dielectric Resonator Voltage Controlled Oscillator, uses Dielectric resonator to stabilize the frequency, which is a stable and reliable frequency source.

Features: High Frequency Stability, Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

How To Order:





Examples: To order a DRVCO, output frequency 10GHz, output power 13dBm, specify QDVO-10000-13.

The sizes in the following table do not include connectors.

Part Number	Output FREQ. (GHz)	Phase Noise (dBc/Hz@10KHz)	FREQ. Stability (± ppm)	Output PWR. (dBm, min.)	Harmonic (dBc, max.)	Spurious (dBc, max.)	Tuning Voltage (V)	Tuning BW. (MHz)	Size* (mm)
QDVO-10000-13	10	-90	5	13	-25	-70	0~12	15~20	45*40*17.2
QDVO-1000-13	1	-100	5	13	-20	-80	0~12	2	54*40*17.2

PLVCO

PLVCO, Phase Locked Voltage Controlled Oscillator, is simply understood as adding the phase locking function to VCO. Because of the phase lock function, only point frequency can be output.The performance is worse than PLDRO.

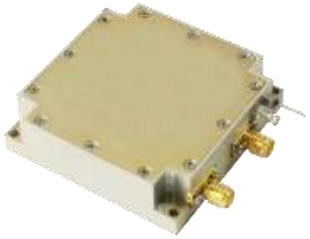
Features: High Frequency Stability, Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.

How To Order:

QPVO-X-Y-Z

- X: Reference Source: External - E, Internal - I, External & Internal - EI
- Y: Reference Frequency (MHz)
- Z: Output Frequency (GHz)

Examples: To order a PLVCO, external reference, reference frequency 100MHz, output frequency 24.35GHz, specify QPVO-E-100-24.35.



External Reference

The sizes in the following table do not include connectors.

Part Number	Output FREQ. (GHz)	Phase Noise (dBc/Hz@10KHz)	Ref. FREQ. (MHz)	Ref. Phase Noise (dBc/Hz@10KHz)	Input PWR. (dBm)	Output PWR. (dBm, min.)	Harmonic (dBc, max.)	Spurious (dBc, max.)	Size* (mm)
QPVO-E-100-24.35	24.35	-85	100	-	0±3	13	-20	-60	74*50*16
QPVO-E-100-18.5	18.5	-95	100	-	0±3	13	-20	-60	74*50*16
QPVO-E-10-13	13	-80	10	-170	0±2	13	-20	-70	74*50*16
QPVO-E-10-12.8	12.8	-80	10	-170	0±2	13	-20	-70	74*50*16
QPVO-E-10-10.4	10.4	-80	10	-170	0±2	13	-20	-70	74*50*16
QPVO-E-10-6.95	6.95	-90	10	-170	0±2	13	-20	-75	57.2*57.2*16
QPVO-E-100-6.85	6.85	-105	100	-	0±3	13	-20	-60	74*50*16

Internal Reference

The sizes in the following table do not include connectors.

Part Number	Output FREQ. (GHz)	Phase Noise (dBc/Hz) (dBc/Hz@10KHz)	REF. FREQ. (MHz)	Output Power (dBm, min.)	FREQ. Stability (± ppm)	Harmonic (dBc, max.)	Spurious (dBc, max.)	Size* (mm)
QPVO-I-10-32	32	-80	10	12	1	-	-60	50.8*47.8*15.2
QPVO-I-50-1.61	1.61	-90	50	30	1	-20	-70	90*50*16
QPVO-I-50-0.8	0.8	-90	50	13	1	-20	-70	50*40*10

PLXO

Phase Locked Crystal Oscillator is a point frequency source with excellent performance. All components are encapsulated in Aluminum alloy box to achieve excellent shielding and reliability. It has two operating modes: free oscillation mode (no external reference required) and phase-locked mode (external reference required). When working in free oscillation mode, the phase-locked crystal oscillator has excellent phase noise and spuious suppression performance. When working in the phase-locked mode, the atomic clock is generally used as an external reference, so that the phase-locked crystal oscillator has excellent long-term stability and short-term stability at the same time.

Features: Very Low Phase Noise; **Applications:** Wireless, Transceiver, Laboratory Test.

How To Order:

QPXO-W-XY-Z

- W: Output Frequency (MHz)
- XY: Output Power (dBm)
- Z: Phase Noise @ 10KHz Offset (dBc/Hz)
- Reference Source: External - ET, Internal - IT

Examples: To order a PLXO, output frequency 100MHz, output power 5dBm, external reference, -165dBc/Hz@10KHz, specify QPXO-100-5ET-165.

External Reference

The sizes in the following table do not include connectors.

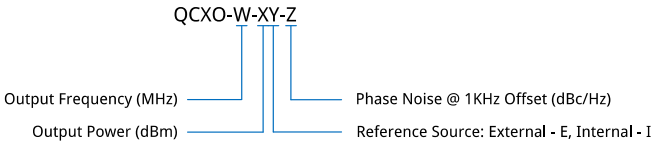
Part Number	Output Frequency (MHz)	Output Channels	Phase Noise (dBc/Hz)					REF. FREQ. (MHz)	Output PWR. (dBm)	Size* (mm)
			@100Hz	@1KHz	@10KHz	@100KHz	@1MHz			
QPXO-120-5ET-170	120	1	-125	-155	-170	-173	-	10	5	50*54*20
QPXO-110-5ET-165	110 (RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	51*60*20
QPXO-100-5ET-170	100 (RF1/RF2)	2	-125	-155	-170	-173	-	10	5	51*60*20
QPXO-100-5ET-165-1	100 (RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	50*54*20
QPXO-100-5ET-165	100 (RF1/RF2), 10 (RF3)	3	-125	-155	-165	-165	-165	10	5	51*60*20
QPXO-90-5ET-165	90 (RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	51*60*20
QPXO-80-5ET-165	80 (RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	51*60*20
QPXO-70-5ET-165	70(RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	51*60*20
QPXO-40-5ET-165	70(RF1/RF2)	2	-125	-155	-165	-165	-165	10	5	51*60*20

OCXO

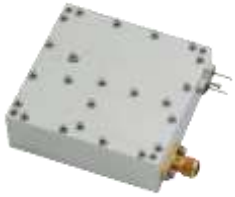
OCXO, also known as a constant temperature crystal oscillator, is a crystal oscillator that uses a constant temperature bath to keep the temperature in the quartz crystal resonator of the crystal oscillator constant, reducing the output frequency change caused by surrounding temperature changes to the minimum.

Features: High Frequency Stability, Low Phase Noise; **Applications:** Wireless, Transceiver, Laboratory Test.

How To Order:



Examples: To order a OCXO, output frequency 10MHz, output power 11dBm, external reference, -165dBc/Hz@1KHz, specify QCXO-10-11E-165.



External Reference

Part Number	Output FREQ.	Phase Noise (dBc/Hz)					REF. FREQ.	Output PWR.	Harmonic	Spurious	Size*
	(MHz)	@10Hz	@100Hz	@1KHz	@10KHz	@100KHz	(MHz)	(dBm, min.)	(dBc, max.)		(mm)
QCXO-10-11E-165	10	-130	-155	-165	-165	-165	10	11	-30	-80	57.2*57.2*20
QCXO-240-5E-145	240	-	-	-145	-155	-160	240	5	-30	-75	57.2*57.2*20

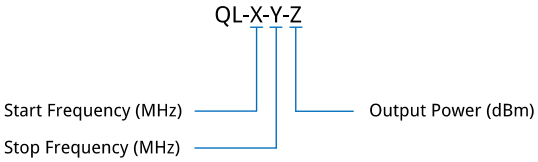
Limiters

Limiter is a self controlled attenuator and a power modulation component. When the input power of the signal is small and there is no attenuation, the attenuation will rapidly increase when the input power exceeds a certain value. This power value is called the threshold level. After the input power exceeds the threshold level, the output power will no longer increase.

Features: Broadband; **Applications:** Wireless, Transmitter, Laboratory Test, Radar.

Limiters

How To Order:



Examples: To order a limiter, 0.05~6GHz, output power 17dBm, SMA female, specify QL-50-6000-17-S.

The sizes in the following table do not include connectors.

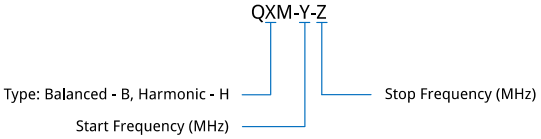
Part Number	Frequency (GHz)	Insertion Loss (dB, max.)	Average Power (W, max.)	Output Power (dBm, max.)	VSWR (max.)	Connector	Size*
QL-30-10	0.03	1.2	10	10	1.5	SMA	20*13*13
QL-50-6000-17-S	0.05~6	0.85	50	17 typ.	2.2 typ.	SMA	24*20*12
QL-50-6000-17-N	0.05~6	0.85	50	17 typ.	2.2 typ.	N	24*20*20
QL-300-6000-10	0.3~6	1.2	10	10	1.5	SMA	20*13*13
QL-2000-18000-15	2~18	0.6	5	15	2	SMA	30*20*12
QL-8000-12000-10	8~12	1.2	5	10	1.5	SMA	20*13*13

Mixers

A mixer is a circuit whose output signal frequency is equal to the sum, difference or other combination of the two input signal frequencies. Qualwave supplies low conversion loss and high isolation mixers in a broad range from 1kHz to 110GHz.

Features: Low Conversion Loss, High Isolation; **Applications:** Wireless, Transceiver, Laboratory Test, Broadcast.

How To Order:



Examples: To order a Balanced Mixer, 75~110GHz, specify QBM-75000-110000.

Balanced Mixers

The sizes in the following table do not include connectors.

Part Number	RF Frequency (GHz)	LO Frequency (GHz)	IF Frequency (GHz)	Conversion Loss (dB, typ.)	LO & RF Isolation (dB, typ.)	LO & IF Isolation (dB, typ.)	LO Input Power (+ dBm, typ.)	Size* (mm)
QBM-1-6000	0.001~6	0.001~6	DC~1	8	35	25	10	30*30*10
QBM-10-2000	0.01~2	0.01~2	0.01~1	10	30	40	7	32*32*10
QBM-300-4300	0.3~4.3	0.3~4.3	DC~1	8.5	20	7	13	32*32*10
QBM-2500-8000	2.5~8	2.5~8	DC~4	10	18~25	15~20	13	16*16*8
QBM-2500-18000	2.5~18	2.5~18	DC~6	10	16	25	13	16*13*8
QBM-5000-8000	5~8	4.5~8	0.5~3	9	55	35~42	17	17.5*16.5*8
QBM-6000-8000	6~8	7~10	DC~2	9	17~25	20~28	13	17.5*16.5*8
QBM-6000-26000	6~26	6~26	DC~8	9	37~39	21~37	13	17.5*16.5*8
QBM-6435-6935	6.435~6.935	4.435	2~2.5	8	30	25	13	16*16*10
QBM-10000-11000	10~11	10~11	DC~0.2	10	30	30	9	28*24*13.5
QBM-10000-44000	10~44	10~44	DC~14	10	47	49	15	17.5*16.5*8
QBM-10870-11370	10.87~11.37	8.87	2~2.5	8	30	30	13	16*16*10
QBM-18000-40000	18~40	26~33	6~8	10	41	32	13	17.5*16.5*8
QBM-20000-50000	20~50	20~50	DC~16	13	20	-	15	39.94*32.49*12.6
QBM-24000-40000	24~40	24~40	DC~20	10	40	30	9	17.5*16.5*8
QBM-25000-27500	25~27.5	23~24.5	1~4	12	30	25	13	17.5*16.5*8
QBM-33000-37000	33~37	33~37	DC~2	9	41	32	13	17.5*16.5*8
QBM-75000-110000	75~110	-	DC~12	10	20	-	15	30*26*22

Phase Shifters

Qualwave supplies low insertion loss and high power phase shifters from DC to 40GHz. The phase adjustment is up to 900°/GHz.

Manual Phase Shifters

Manual phase shifter, which is used to adjust the phase through the manual knob.

Features: Broadband, High Sensitivity; **Applications:** Telecom, Instrumentation, Laboratory Test, Radar.

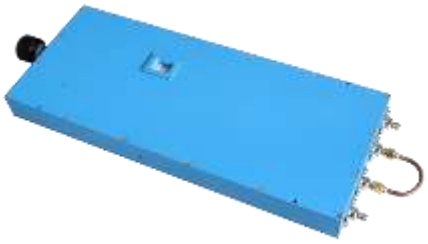
How To Order:

QMPSW-X-Y-Z

- Phase Adjustment (°/GHz)
- Stop Frequency (GHz)
- Display: Analog - A, Digital - D (Note: If this option is not available, leave blank)
- Connector Type

Examples: To order a manual phase shifter, DC-40GHz, 2.92mm male to 2.92mm female, specify QMPS5-40-KKF.

QMPS360 (Analog):



QMPS20 (Without Display):

Digital:

Analog:

The sizes in the following table do not include connectors.

Part Number	Phase Adjustment (°/GHz)	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Average Power (W)	Connector (Y)	Display (Z)	Size* (mm)
QMPS5-40-KKF	5.4	DC~40	1.5	0.8	-	KKF: 2.92mm (m)-2.92mm (f)	-	Φ9*41.1~45.6
QMPS10-26.5-SSF	10.2	DC~26.5	1.3	0.8	-	SSF: SMA (m)-SMA (f)	-	Φ9*50.6~59.1
QMPS20-2-S	20	DC~2	1.25	0.35	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS20-3-S	20	DC~3	1.3	0.5	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS20-6-S	20	DC~6	1.4	0.75	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS20-9-S	20	DC~9	1.5	1	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS20-12-S	20	DC~12	1.6	1.25	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS20-18-S	20	DC~18	1.6	1.5	50	S: SMA (m)-SMA (f)	-	70*13*15
QMPS45-1-S	45	DC~1	1.2	0.3	50	S: SMA (f)-SMA (f)	-	131.5*48*21
QMPS45-2-S	45	DC~2	1.3	0.5	50	S: SMA (f)-SMA (f)	-	131.5*48*21
QMPS45-4-S	45	DC~4	1.4	0.75	50	S: SMA (f)-SMA (f)	-	131.5*48*21
QMPS45-6-S	45	DC~6	1.5	1	50	S: SMA (f)-SMA (f)	-	131.5*48*21
QMPS45-8-S	45	DC~8	1.5	1.25	50	S: SMA (f)-SMA (f)	-	131.5*48*21
QMPS60-1-Y-Z	60	DC~1	1.2	0.3	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-2-Y-Z	60	DC~2	1.3	0.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-3-Y-Z	60	DC~3	1.4	0.8	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-4-Y-Z	60	DC~4	1.4	1	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-6-Y-Z	60	DC~6	1.5	1	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-8-Y-Z	60	DC~8	1.5	1.25	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS90-1-Y-Z	90	DC~1	1.2	0.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-2-Y-Z	90	DC~2	1.3	0.8	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-3-Y-Z	90	DC~3	1.4	1.2	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-4-Y-Z	90	DC~4	1.4	1.2	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-6-Y-Z	90	DC~6	1.5	1.4	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5

The sizes in the following table do not include connectors.

Part Number	Phase Adjustment (°/GHz)	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Average Power (W)	Connector (Y)	Display (Z)	Size* (mm)
QMPS90-8-Y-Z	90	DC~8	1.5	1.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS180-1-Y-Z	180	DC~1	1.4	1	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-2-Y-Z	180	DC~2	1.5	1.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-3-Y-Z	180	DC~3	1.5	1.75	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-4-Y-Z	180	DC~4	1.5	2	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS360-1-Y-Z	360	DC~1	1.4	1.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 390*134*30.5 D: 395*134*50.5
QMPS360-2-Y-Z	360	DC~2	1.5	2	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog D: Digital	A: 390*134*30.5 D: 395*134*50.5
QMPS900-1-Y-A	900	DC~1	1.5	2.5	100	S: SMA (f)-SMA (f) N: N (f)-N (f)	A: Analog	692*148*67.5

Digital Controlled Phase Shifters

Digital controlled phase shifter, a phase shifter that adjusts the phase through the combination of control voltage (generally TTL level).

How To Order:

QDPS-W-X-Y-Z

- W: Start Frequency (MHz)
- X: Stop Frequency (MHz)
- Y: Control Bits (Bits)
- Z: Maximum Phase Shifting Degree (°)

Examples: To order a digital controlled phase shifter, 1~2GHz, phase range 0~360°, 6 bits, specify QDPS-1000-2000-360-6.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Phase Range (°)	Step (°)	Control Bits (Bits)	Phase Flatness (±°, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Input Power (dBm, typ.)	Size* (mm)
QDPS-400-2000-360-6	0.4~2	360	5.625	6	3	19	2.2	24	24*18*12
QDPS-1000-2000-360-6	1~2	360	5.6	6	15	5.5	2.5	27	45*43*14
QDPS-1300-1500-360-6	1.3~1.5	360	5.625	6	8	5	2	22	48*36*15
QDPS-1700-1975-360-6	1.7~1.975	360	5.625	6	3	5	2	25	32*28*9.5
QDPS-2000-4000-360-6	2~4	360	5.625	6	30	6	3	27	45*43*14
QDPS-2000-8000-360-6	2~8	360	5.625	6	4	20	2	24	24*18*12
QDPS-7000-9000-360-7	7~9	360	2.8125	7	-	14	2.2	10	35*45*12
QDPS-8000-18000-360-6	8~18	360	5.625	6	3	16	2.2	24	24*18*12
QDPS-9000-10000-360-6	9~10	360	5.625	6	8	8	2	22	48*36*15
QDPS-25000-27000-270-2	25~27	270	90	2	2	10.5	2.5	-	35*45*12

Voltage Controlled Phase Shifters

Voltage controlled phase shifter, a phase shifter that adjusts the phase through the continuous change of voltage.

How To Order:

QVPSX-Y-Z

- Maximum Phase Shifting Degree (°)
- Start Frequency (MHz)
- Stop Frequency (MHz)

Examples: To order a voltage controlled phase shifter, phase range 0~360°, 0.25~0.5GHz, specify QVPS360-250-500.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Phase Range (°)	Phase Flatness (±°, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Average Power (dBm, max.)	Size* (mm)
QVPS360-250-500	0.25~0.5	360	30	5	2	30	SMA

Power Dividers/Combiners

Power divider is a component used for power distribution, which divides the power signal into multiple outputs. Combiner, a component of power synthesis, which combines multiple signals. Generally, a combiner is a power divider when it is used reversely, but the power divider may not be used as a combiner.

Qualwave supplies broadband and high reliable power dividers from DC to 110GHz. Our standard parts cover most commonly used number of ways from 2-way to 64-way.

How To Order:

QPDV-W-X-Y-Z

- W: Number of Ways
- X: Start Frequency (MHz)
- Y: Stop Frequency (MHz)
- Z: Connector Type
- V: Power (W)

Examples: To order a 2-Way power divider, 0.5~6GHz, 30W, N female, specify QPD2-500-6000-30-N.

Features:

- Broadband
- High reliability
- Low insertion loss

Applications:

- Amplifiers
- Mixers
- Antennas
- Laboratory Test

2-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD2-0-8000-1-S	DC~8	1/-	7.5	6	0.5/5	1.3	SMA	28*24.2*12
QPD2-0-8000-1-N	DC~8	1/-	7.5	6	0.5/5	1.3	N	38*32*20
QPD2-0-18000-R5-S	DC~18	0.5/-	6±1.5	-	0.5/11	1.6	SMA	28*12*24.2
QPD2-0-26500-1-K	DC~26.5	1/0.1	2	-	0.3/3	1.4	2.92mm	12.7*12.7*9.52
QPD2-0-26500-2-S	DC~26.5	2/-	7.5	8	0.4/3	2.5	SMA	19.1*16.6*10
QPD2-0-40000-2-K	DC~40	2/-	7.5	9	0.5/5	2.5	2.92mm	17.5*15.8*10
QPD2-0-50000-1-2	DC~50	1/-	7.8	9	0.8/8	2.5	2.4mm	17.5*15.8*10
QPD2-0-67000-1-V	DC~67	1/-	8	9	0.9/10	2.5	1.85mm	17.5*15.8*10
QPD2-0.2-2-10-S	0.0002~0.002	10/-	0.5	20	0.2/2	1.3	SMA	31.95*31.75*19.05
QPD2-1-500-25-S	0.001~0.5	25/25	1	15	0.3/5	1.4	SMA	32*32*20
QPD2-1-500-K1-S	0.001~0.5	100/100	0.5	15	0.3/5	1.4	SMA	60*80*22
QPD2-1-700-1-S	0.001~0.7	1/0.5	0.6	20	0.25/1	1.25	SMA	28*28*12.7
QPD2-1-700-2-S	0.001~0.7	2/1	0.75	20	0.1/1	1.4	SMA	28*28*12.7
QPD2-2-30-2K-N	0.002~0.03	2K/-	0.15	30	0.1/1	1.2	N	160*166*58
QPD2-2-1000-10-S	0.002~1	10/-	1.2	15	0.2/5	1.6	SMA	31.95*31.75*19.05
QPD2-4-30-K8-N	0.004~0.03	800/800	0.3	20	-/-	1.3	N	148*148*45
QPD2-5-1000-1-S	0.005~1	1/0.5	0.9	19	0.3/2	1.35	SMA	28*28*12.7
QPD2-5-1000-1-N	0.005~1	1/0.5	0.9	19	0.3/2	1.35	N	42*28*20
QPD2-5-1000-1-B	0.005~1	1/0.5	1	17	0.3/3	1.25	BNC	56*34*22
QPD2-10-500-K1-S	0.01~0.5	100/100	0.6	12	0.2/3	1.6	SMA	50.8*82.55*20
QPD2-20-500-K1-S	0.02~0.5	100/100	0.9	15	0.2/5	1.6	SMA	60*80*22
QPD2-20-500-K35-N	0.02~0.5	350/350	1	8	0.2/2	1.7	N	210*210*22
QPD2-20-1000-1K-7N	0.02~1	1000/1000	0.8	18	0.3/5	1.4	7/16DIN&N	170*160*60
QPD2-20-1000-K2-S	0.02~1	200/200	0.6	20	0.3/5	1.35	SMA	80*60*22
QPD2-30-90-K2-S	0.03~0.09	200/-	3.5	15	0.5/5	1.3	SMA	-
QPD2-30-90-K2-N	0.03~0.09	200/-	3.5	15	0.5/5	1.3	N	110*60*71
QPD2-30-300-2-N	0.03~0.3	2/-	6.8	5.6	0.3/3	1.2	N	38*32*20
QPD2-30-400-20-S	0.03~0.4	20/2	1.8	20	0.2/2	1.2	SMA	250*80*12
QPD2-30-400-K1-N	0.03~0.4	100/100	0.5	20	0.1/3	1.35	N	60*80*30
QPD2-30-406-K5-N-1	0.03~0.406	500/200	0.8	10	0.2/2	1.6	N	170*175*30
QPD2-30-406-K5-S	0.03~0.406	500/500	0.5	20	0.1/3	1.35	SMA	60*80*22
QPD2-30-512-K3-N	0.03~0.512	300/100	1.4	20	0.2/2	1.25	N	295*224*22
QPD2-30-512-30-S	0.03~0.512	30/2	2.8	20	0.3/3	1.25	SMA	-
QPD2-30-512-K2-S	0.03~0.512	200/200	0.5	20	0.2/5	1.3	SMA	80*60*22

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD2-30-650-K2-S	0.03~0.65	200/-	0.85	10	0.2/2	1.6	SMA	160*160*17
QPD2-30-1000-20-S	0.03~1	20/2	2.5	20	0.3/3	1.3	SMA	140*110*10
QPD2-30-1000-20-N	0.03~1	20/2	2.8	20	0.3/3	1.3	N	140*110*20
QPD2-30-3000-1-S	0.03~3	1/0.5	2.5	10	0.3/4	2.2	SMA	52*52*19
QPD2-30-3000-2-N	0.03~3	2/-	6.8	5.6	0.3/-	1.2	N	38*32*20
QPD2-30-3000-2-S	0.03~3	2/-	6.8	5.6	0.3/3	1.2	SMA	28*28*10
QPD2-50-500-1-S	0.05~0.5	1/0.5	0.6	18	0.3/3	1.3	SMA	28*28*12.7
QPD2-50-500-1-N	0.05~0.5	1/0.5	1	20	0.3/3	1.25	N	56*34*22
QPD2-52-57-K6-N	0.052~0.057	600/60	0.3	20	0.2/2	1.25	N	274*170*22
QPD2-68-72-1-N	0.068~0.072	1/0.5	0.3	20	0.2/2	1.2	N	56*34*22
QPD2-68-72-30-N	0.068~0.072	30/2	0.4	20	0.2/2	1.2	N	106*82*22
QPD2-68-72-K2-N	0.068~0.072	200/20	0.3	20	0.2/2	1.2	N	283*110*22
QPD2-70-2700-K1-N	0.07~2.7	100/5	2	15	0.2/3	1.5	N	334*60*20
QPD2-70-4200-20-S	0.07~4.2	20/2	5	18	0.3/3	1.5	SMA	260*42*12
QPD2-80-110-30-S	0.08~0.11	30/2	0.4	20	0.2/2	1.2	SMA	108*70*10
QPD2-80-500-30-S	0.08~0.5	30/2	0.8	19	0.2/2	1.25	SMA	110*62*12
QPD2-80-500-2K-EN	0.08~0.5	2000/2000	0.4	8	0.2/±5	1.6	SC&N	172*124*26
QPD2-80-1000-K3-S	0.08~1	300/300	0.6	15	0.3/5	1.35	SMA	80*60*22
QPD2-80-2000-30-S	0.08~2	30/2	1.8	19	0.2/2	1.25	SMA	110*62*12
QPD2-80-2000-30-N	0.08~2	30/2	1.8	20	0.2/2	1.25	N	110*62*20
QPD2-80-4000-30-S	0.08~4	30/2	2.5	16	0.3/3	1.5	SMA	156*44*12
QPD2-100-200-K1-N	0.1~0.2	100/10	0.3	20	0.2/2	1.2	N	168*90*22
QPD2-100-350-30-S	0.1~0.35	30/2	1	20	0.2/2	1.25	SMA	98*70*14
QPD2-100-400-30-N	0.1~0.4	30/2	1	22	0.2/2	1.2	N	98*72*20
QPD2-100-400-K2-N	0.1~0.4	200/20	0.4	20	0.2/2	1.2	N	195*102*22
QPD2-100-500-50-S	0.1~0.5	50/5	0.5	20	0.2/3	1.25	SMA	130*80*14
QPD2-100-500-50-N	0.1~0.5	50/3	0.5	20	0.2/2	1.25	N	132*84*22
QPD2-100-500-K3-N-20	0.1~0.5	300/20	0.5	20	0.2/2	1.25	N	262*84*22
QPD2-100-500-K3-N-K1	0.1~0.5	300/100	0.5	20	0.2/2	1.25	N	262*84*24
QPD2-100-500-K4-7	0.1~0.5	400/100	0.6	20	0.2/2	1.25	7/16DIN	260*88*35
QPD2-100-512-30-N	0.1~0.512	30/2	0.7	23	0.2/2	1.3	N	98*60*22
QPD2-100-520-2K-7N	0.1~0.52	2000/2000	0.6	15	0.3/5	1.35	7/16DIN&N	197*160*66
QPD2-100-550-K1-N	0.1~0.55	100/10	0.5	20	0.2/2	1.2	N	226*80*22
QPD2-100-600-30-S	0.1~0.6	30/2	0.8	20	0.2/2	1.2	SMA	85*70*12
QPD2-100-1000-30-S	0.1~1	30/2	1.2	20	0.2/2	1.2	SMA	110*62*12
QPD2-100-3000-30-S	0.1~3	30/2	2.5	18	0.2/3	1..25	SMA	110*50*10
QPD2-100-4000-30-S	0.1~4	30/2	2	16	0.3/3	1.4	SMA	120*40*12
QPD2-134-3700-30-N	0.134~3.7	30/2	2.2	18	0.3/3	1.3	N	111*50*20
QPD2-136-174-K3-N	0.136~0.174	300/25	0.3	20	0.2/2	1.2	N	226*90*22
QPD2-138-960-50-N	0.138~0.96	50/3	0.6	18	0.2/3	1.25	N	150*58*20
QPD2-150-980-50-N	0.15~0.98	50/2	0.6	20	0.3/3	1.3	N	150*78*20
QPD2-200-1000-30-S	0.2~1	30/2	0.6	20	0.2/2	1.25	SMA	82*48*12
QPD2-200-2000-K4-T	0.2~2	400/400	0.8	-	0.5/6	1.5	TNC	138*104*12
QPD2-200-2000-30-S	0.2~2	30/2	0.8	20	0.2/3	1.25	SMA	85*44*12
QPD2-200-6000-30-S	0.2~6	30/2	2.2	18	0.3/3	1.25	SMA	123*38*12
QPD2-200-6000-30-N	0.2~6	30/2	2.2	18	0.3/3	1.25	N	123*46*20
QPD2-200-6000-50-S	0.2~6	50/5	6	18	0.2/3	1.4	SMA	290*44*15
QPD2-210-240-50-N	0.21~0.24	50/5	0.3	20	0.2/2	1.2	N	84*76*20
QPD2-225-512-K1-N	0.225~0.512	100/10	0.3	20	0.2/2	1.2	N	134*80*22
QPD2-300-500-50-S	0.3~0.5	50/5	0.3	20	0.2/2	1.2	SMA	85*50*14
QPD2-300-600-30-S	0.3~0.6	30/2	0.4	20	0.2/2	1.2	SMA	53*52*12
QPD2-300-600-50-N	0.3~0.6	50/5	0.3	20	0.2/2	1.2	N	85*50*20
QPD2-300-900-30-S	0.3~0.9	30/2	0.6	20	0.2/2	1.2	SMA	82*48*12
QPD2-300-1000-20-S	0.3~1	20/2	0.6	20	0.2/2	1.2	SMA	60*50*12
QPD2-300-1000-20-N	0.3~1	20/2	0.8	20	0.2/2	1.25	N	60*50*20
QPD2-300-1800-K3-N	0.3~1.8	300/30	0.6	18	0.2/2	1.3	N	110*78*22
QPD2-300-3000-30-S	0.3~3	30/2	0.9	20	0.1/3	1.25	SMA	52*50*12
QPD2-300-3000-30-N	0.3~3	30/2	0.9	20	0.1/3	1.25	N	52*50*20
QPD2-300-18000-30-S	0.3~18	30/5	2.4	18	0.3/4	1.5	SMA	216.5*25.8*12.7
QPD2-300-26500-30-S	0.3~26.5	30/2	3.4	18	0.4/5	1.6	SMA	216.5*25.8*12.7
QPD2-300-67000-12-V	0.3~67	12/1	8.2	18	0.7/9	1.9	1.85mm	216.5*25.8*12.7

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD2-336-366-30-N	0.336~0.366	30/2	0.3	20	0.2/2	1.2	N	80*52*20
QPD2-350-520-K15-N	0.35~0.52	150/50	0.3	20	0.2/2	1.2	N	90*70*22
QPD2-350-3800-30-S	0.35~3.8	30/2	1.2	20	0.2/3	1.25	SMA	62*42*12
QPD2-350-3800-30-N	0.35~3.8	30/2	1.2	20	0.2/3	1.25	N	62*50*20
QPD2-350-6000-30-S	0.35~6	30/2	1.1	20	0.05/1	1.3	SMA	60*38*12
QPD2-380-410-K3-N	0.38~0.41	300/80	0.3	20	0.2/2	1.2	N	152*80*22
QPD2-380-460-K1-7	0.38~0.46	100/-	0.3	20	0.2/2	1.2	7/16DIN	95*78*30
QPD2-380-470-K3-N	0.38~0.47	300/25	0.3	20	0.2/2	1.2	N	144*80*22
QPD2-380-8000-30-S	0.38~8	30/1	1.6	18	0.3/3	1.25	SMA	78*28*10
QPD2-400-450-K1-N	0.4~0.45	100/10	0.4	20	0.2/2	1.2	N	70*68*20
QPD2-400-470-30-S	0.4~0.47	30/2	0.5	20	0.2/2	1.2	SMA	54*52*12
QPD2-400-1000-K2-N	0.4~1	200/20	0.4	18	0.2/2	1.25	N	126*58*22
QPD2-400-1000-K3-N	0.4~1	300/30	0.4	18	0.2/2	1.25	N	126*58*22
QPD2-400-2700-30-S	0.4~2.7	30/2	0.8	20	0.2/3	1.2	SMA	56*50*12
QPD2-400-6000-30-S	0.4~6	30/2	1	20	0.2/2	1.3	SMA	60*38*12
QPD2-400-6000-30-N	0.4~6	30/2	1	20	0.2/2	1.3	N	60*42*20
QPD2-400-7500-20-S	0.4~7.5	20/1	1.5	20	0.3/3	1.35	SMA	75*28*10
QPD2-400-8000-30-S	0.4~8	30/2	1.5	18	0.3/3	1.3	SMA	74*35*12
QPD2-400-18000-20-S	0.4~18	20/1	1.2	12	0.3/5	1.7	SMA	157*26*10
QPD2-430-950-30-S	0.43~0.95	30/2	0.3	22	0.2/2	1.2	SMA	84*50*12
QPD2-500-1000-30-S	0.5~1	30/2	0.3	20	0.2/2	1.2	SMA	56*34*12
QPD2-500-1000-30-N	0.5~1	30/2	0.4	22	0.2/2	1.2	N	52*41*20
QPD2-500-2000-20-S	0.5~2	20/-	0.5	20	0.2/2	1.3	SMA	54*28*12
QPD2-500-3000-30-S	0.5~3	30/2	0.6	22	0.2/3	1.25	SMA	48*40*12
QPD2-500-3000-30-N	0.5~3	30/2	0.6	20	0.2/3	1.25	N	56*50*20
QPD2-500-4000-30-S	0.5~4	30/2	0.8	20	0.2/3	1.25	SMA	46*42*12
QPD2-500-6000-30-S	0.5~6	30/2	1.1	20	0.2/3	1.25	SMA	48*36*12
QPD2-500-6000-30-N	0.5~6	30/2	1.2	20	0.2/3	1.25	N	56*50*20
QPD2-500-6000-30-S-DC	0.5~6	30/2	1.1	20	0.2/3	1.3	SMA	48*36*12
QPD2-500-6000-30-S-1	0.5~6	30/2	1	18	0.2/2	1.4	SMA	40*45*12
QPD2-500-8000-30-S	0.5~8	30/2	1.2	20	0.2/1	1.3	SMA	60*35*12
QPD2-500-8000-30-N	0.5~8	30/2	1.8	20	0.2/3	1.25	N	74*38*20
QPD2-500-10500-30-S	0.5~10.5	30/1	1.4	18	0.3/3	1.45	SMA	74*28*10
QPD2-500-18000-20-S	0.5~18	20/1	1.2	16	0.3/4	1.6	SMA	157*26*10
QPD2-500-18000-30-N	0.5~18	30/1	1.5	16	0.3/4	1.6	N	157*48*20
QPD2-500-26500-20-S	0.5~26.5	20/-	2.4	17	0.4/4	1.6	SMA	149.2*26.4*12.7
QPD2-500-40000-20-K	0.5~40	20/-	3.5	16	0.5/6	1.6	2.92mm	149.2*26.4*12.7
QPD2-500-50000-20-2	0.5~50	20/1	3.9	18	0.4/6	1.7	2.4mm	149.2*26.4*12.7
QPD2-555-3400-30-N	0.555~3.4	30/2	0.6	20	0.2/2	1.2	N	64*54*20
QPD2-600-2000-30-S	0.6~2	30/2	0.4	20	0.2/3	1.2	SMA	48*44*12
QPD2-600-6000-30-S	0.6~6	30/2	0.9	20	0.2/1	1.25	SMA	45*36*12
QPD2-600-6000-30-N	0.6~6	30/2	0.9	20	0.2/1	1.25	N	50*48*20
QPD2-700-2700-30-S	0.7~2.7	30/2	0.5	20	0.2/2	1.2	SMA	42*38*14
QPD2-700-2700-K2-N	0.7~2.7	200/15	0.6	18	0.2/3	1.25	N	82*62*22
QPD2-700-4000-30-S	0.7~4	30/2	0.6	20	0.2/3	1.25	SMA	42*40*12
QPD2-700-4000-30-N	0.7~4	30/2	0.6	20	0.2/3	1.25	N	50*45*20
QPD2-700-4700-30-N	0.7~4.7	30/2	1	20	0.2/3	1.25	N	56*50*20
QPD2-700-5000-30-N	0.7~5	30/2	1	18	0.2/4	1.3	N	70*54*22
QPD2-700-9000-20-S	0.7~9	20/1	1.2	18	0.2/3	1.25	SMA	55*28*10
QPD2-800-1880-K2-N	0.8~1.88	200/20	0.3	25	0.2/2	1.25	N	66*68*22
QPD2-800-2500-30-S	0.8~2.5	30/2	0.4	20	0.2/2	1.2	SMA	43*35*14
QPD2-800-2700-30-S	0.8~2.7	30/2	0.5	22	0.1/0.5	1.2	SMA	35*43*14
QPD2-800-2700-50-N	0.8~2.7	50/2	0.5	20	0.2/3	1.25	N	45.7*75*18.7
QPD2-800-3000-30-S	0.8~3	30/2	0.5	20	0.2/3	1.25	SMA	43*35*14
QPD2-800-3000-30-N	0.8~3	30/2	0.6	20	0.2/3	1.25	N	50*43*20
QPD2-800-3800-K2-7	0.8~3.8	200/10	0.9	20	0.2/3	1.3	7/16DIN	95*58*30
QPD2-800-4000-30-S	0.8~4	30/2	0.8	22	0.2/3	1.2	SMA	45*36*12
QPD2-900-1300-K1-N	0.9~1.3	100/100	0.5	20	0.1/3	1.25	N	60*80*30
QPD2-900-2100-30-N-DC	0.9~2.1	30/2	0.5	20	0.2/2	1.25	N	56*46*20.5
QPD2-950-2150-30-S	0.95~2.15	30/2	0.4	20	0.1/2	1.25	SMA	28*27.8*11.1
QPD2-950-2150-30-N	0.95~2.15	30/2	0.4	20	0.1/2	1.25	N	50*30*20

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD2-950-2150-30-S-DC	0.95~2.15	30/2	0.3	20	0.2/2	1.2	SMA	28*27.8*11.1
QPD2-950-2150-30-N-DC	0.95~2.15	30/2	0.3	20	0.2/2	1.2	N	56*46*20.5
QPD2-960-9000-10-S	0.96~9	10/-	1.2	15	0.6/10	1.6	SMA	99*24*10
QPD2-1000-2000-30-S	1~2	30/2	0.4	20	0.2/2	1.2	SMA	27.8*28*11.1
QPD2-1000-2000-30-N	1~2	30/2	0.35	20	0.2/2	1.2	N	43*29*20
QPD2-1000-2000-30-S-DC	1~2	30/2	0.4	20	0.2/2	1.2	SMA	28*27.8*11.1
QPD2-1000-2000-30-T	1~2	30/2	0.5	20	0.2/2	1.25	TNC	56*46*20.5
QPD2-1000-2500-30-N	1~2.5	30/2	0.4	20	0.2/2	1.2	N	56*46*20.5
QPD2-1000-3000-30-S	1~3	30/2	0.4	25	0.1/0.5	1.15	SMA	43*35*14
QPD2-1000-4000-30-S	1~4	30/2	0.4	20	0.2/2	1.2	SMA	28*28*10
QPD2-1000-4000-50-S	1~4	50/3	0.8	20	0.2/3	1.25	SMA	64*40*14
QPD2-1000-4000-K2-N	1~4	200/10	1.2	16	0.3/4	1.5	N	80*60*24
QPD2-1000-8000-30-S	1~8	30/2	0.8	20	0.2/3	1.25	SMA	41*28*10
QPD2-1000-9000-30-S	1~9	30/2	1.4	20	0.2/3	1.25	SMA	52*28*10
QPD2-1000-9000-30-N	1~9	30/2	1.5	20	0.2/3	1.25	N	52*50*20
QPD2-1000-12000-20-S	1~12	20/1	1	18	0.3/4	1.4	SMA	99*24*10
QPD2-1000-18000-20-S	1~18	20/1	1.2	16	0.3/3	1.4	SMA	99*24*10
QPD2-1000-26500-20-S	1~26.5	20/1	1.2	16	0.5/6	1.7	SMA	81*26*10
QPD2-1000-26500-20-K	1~26.5	20/1	1.2	16	0.5/6	1.7	2.92mm	81*26*10
QPD2-1000-40000-20-K	1~40	20/1	1.8	16	0.4/5	1.8	2.92mm	78*26*10
QPD2-1000-50000-20-2	1~50	20/1	3.2	18	0.5/6	1.7	2.4mm	95.3*25.9*12.7
QPD2-1000-65000-12-V	1~65	12/1	3.8	18	0.6/8	1.7	1.85mm	95.3*25.9*12.7
QPD2-1000-67000-12-V	1~67	12/1	3.9	18	0.6/8	1.7	1.85mm	95.3*25.9*12.7
QPD2-1100-1700-30-S	1.1~1.7	30/2	0.3	20	0.2/2	1.2	SMA	28*28*10
QPD2-1100-1700-30-B	1.1~1.7	30/2	0.4	20	0.2/2	1.2	BNC	56*46*20.5
QPD2-1300-2400-30-S	1.3~2.4	30/2	0.4	22	0.2/2	1.2	SMA	42*28*12
QPD2-1350-1450-20-S	1.35~1.45	20/1	0.3	30	0.2/2	1.2	SMA	28*28*10
QPD2-1500-18000-20-S	1.5~18	20/1	1.2	16	0.3/3	1.4	SMA	99*24*10
QPD2-1700-5900-30-N	1.7~5.9	30/2	0.5	22	0.2/3	1.2	N	38*34*20
QPD2-1700-6000-50-S	1.7~6	50/-	0.5	18	0.2/2	1.4	SMA	45.5*26.4*12.7
QPD2-1700-9000-30-S	1.7~9	30/2	0.6	18	0.2/3	1.3	SMA	34*28*10
QPD2-2000-2300-K1-S	2~2.3	100/-	0.4	20	0.2/2	1.25	SMA	31.95*31.75*19.05
QPD2-2000-2400-30-N	2~2.4	30/2	0.3	20	0.2/2	1.25	N	43*29*20
QPD2-2000-4000-30-S	2~4	30/2	0.5	20	0.2/2	1.25	SMA	36*34*12
QPD2-2000-4000-30-N	2~4	30/2	0.4	20	0.2/2	1.25	N	43*29*20
QPD2-2000-4000-125-N	2~4	125/10	0.3	20	0.2/3	1.2	N	72*50*20
QPD2-2000-4000-K3-N	2~4	300/15	0.5	18	0.2/2	1.3	N	70*52*22
QPD2-2000-6000-30-S	2~6	30/2	0.5	20	0.2/3	1.25	SMA	28*28*10
QPD2-2000-6000-30-N	2~6	30/2	0.6	20	0.2/3	1.25	N	43*29*20
QPD2-2000-8000-30-S	2~8	30/2	0.6	20	0.2/2	1.3	SMA	28*28*10
QPD2-2000-8000-30-N	2~8	30/2	0.6	20	0.2/2	1.3	N	43*29*20
QPD2-2000-9000-30-S	2~9	30/2	0.6	20	0.2/3	1.25	SMA	34*28*10
QPD2-2000-12000-20-S	2~12	20/1	1	18	0.3/4	1.4	SMA	47*24*10
QPD2-2000-18000-20-S	2~18	20/1	1	18	0.3/4	1.4	SMA	47*24*10
QPD2-2000-26500-20-S	2~26.5	20/1	1.2	17	0.4/4	1.6	SMA	45*25*10
QPD2-2000-40000-20-K	2~40	20/1	1.6	18	0.4/4	1.6	2.92mm	78*26*10
QPD2-2000-50000-20-2	2~50	20/1	2.4	18	0.4/5	1.7	2.4mm	45.5*26.4*12.7
QPD2-2000-65000-12-V	2~65	12/1	3.2	16	0.6/8	1.9	1.85mm	45.5*26.4*12.7
QPD2-2000-67000-12-V	2~67	12/1	3.3	18	0.6/8	1.8	1.85mm	45.5*26.4*12.7
QPD2-2200-2300-30-N	2.2~2.3	30/1	0.4	20	0.2/3	1.2	N	34*38*20
QPD2-2400-2500-K3-S	2.4~2.5	300/15	0.3	30	0.2/2	1.25	SMA	70*50*14
QPD2-2400-2500-K2-S	2.4~2.5	200/10	0.3	30	0.2/2	1.25	SMA	70*50*14
QPD2-2500-4000-K2-N	2.5~4	200/20	0.6	18	0.2/3	1.35	N	58*52*22
QPD2-2500-6000-30-S	2.5~6	30/2	0.4	22	0.1/0.5	1.2	SMA	28*28*10
QPD2-3000-8000-30-S	3~8	30/2	0.6	22	0.1/1	1.2	SMA	28*28*10
QPD2-3000-13000-5-S	3~13	5/1	1.2	18	0.3/5	1.5	SMA	47*24*10
QPD2-3000-26500-20-S	3~26.5	20/1	1.4	17	0.4/4	1.55	SMA	45*25*10
QPD2-3400-3800-30-N	3.4~3.8	30/2	0.3	20	0.2/2	1.2	N	54*40*20
QPD2-3400-3800-K1-N	3.4~3.8	100/10	0.3	20	0.2/2	1.2	N	62*54*20
QPD2-4000-5000-30-S	4~5	30/2	0.4	22	0.2/2	1.25	SMA	28*28*10
QPD2-4000-6000-30-S	4~6	30/2	0.4	20	0.2/2	1.2	SMA	28*28*10

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD2-4000-8000-30-S	4~8	30/2	0.5	20	0.2/2	1.25	SMA	28*28*10
QPD2-4000-8000-30-N	4~8	30/2	0.5	20	0.2/2	1.25	N	43*29*20
QPD2-4000-12000-20-S	4~12	20/1	0.5	20	0.1/1	1.25	SMA	28*28*10
QPD2-4900-5900-30-S	4.9~5.9	30/2	0.4	20	0.2/2	1.25	SMA	36*34*12
QPD2-5000-6000-K2-N-IP65	5~6	200/10	0.5	20	0.2/3	1.25	N	50*36*20
QPD2-5000-18000-20-S	5~18	20/1	1	20	0.3/4	1.35	SMA	47*24*10
QPD2-5150-5850-50-N	5.15~5.85	50/3	0.5	20	0.2/3	1.25	N	44*36*20
QPD2-5150-5850-K2-N	5.15~5.85	200/10	0.6	20	0.2/3	1.25	N	52*50*20
QPD2-5200-5900-K1-S	5.2~5.9	100/20	0.4	20	0.2/2	1.25	SMA	60*45*15
QPD2-5700-5900-30-S	5.7~5.9	30/1	0.4	22	0.2/2	1.2	SMA	28*28*10
QPD2-6000-18000-20-S	6~18	20/1	0.8	18	0.3/4	1.4	SMA	30*24*10
QPD2-6000-18000-K1-S	6~18	100/-	1	15	0.3/4	1.4	SMA	35*30*10
QPD2-6000-40000-20-K	6~40	20/1	1.4	16	0.5/5	1.7	2.92mm	26*19*10
QPD2-6000-50000-20-2	6~50	20/1	1.7	16	0.4/5	1.7	2.4mm	29.2*26.9*12.7
QPD2-6000-65000-12-V	6~65	12/1	2.5	16	0.8/9	1.9	1.85mm	29.2*26.9*12.7
QPD2-6000-67000-12-V	6~67	12/1	2.6	18	0.6/8	1.8	1.85mm	29.2*26.9*12.7
QPD2-7000-9000-K2-S	7~9	200/200	0.5	18	0.2/4	1.3	SMA	48*35*10
QPD2-7000-9000-30-S	7~9	30/2	0.4	20	0.1/2	1.25	SMA	28*28*10
QPD2-7100-7300-K4-N	7.1~7.3	400/400	0.4	18	0.3/4	1.3	N	58*50*22
QPD2-8000-12000-20-S	8~12	20/1	0.5	20	0.1/3	1.25	SMA	28*28*10
QPD2-8000-30000-20-K	8~30	20/1	1.2	16	0.4/4	1.5	2.92mm	26*19*10
QPD2-10000-43000-20-K	10~43	20/1	1.3	12	0.4/5	1.6	2.92mm	26*19*10
QPD2-10000-43300-20-K	10~43.3	20/1	1.6	14	0.5/6	1.6	2.92mm	26*19*10
QPD2-10700-12750-20-S	10.7~12.75	20/1	0.6	18	0.3/3	1.3	SMA	28*28*10
QPD2-12400-13650-20-S	12.4~13.65	20/1	0.6	18	0.2/3	1.3	SMA	30*24*10
QPD2-13500-15000-20-N	13.5~15	20/1	0.4	18	0.2/3	1.25	N	43*29*20
QPD2-17000-31000-20-K	17~31	20/1	1	16	0.4/5	1.5	2.92mm	26*19*10
QPD2-18000-26500-20-K	18~26.5	20/1	0.6	16	0.4/4	1.5	2.92mm	26*19*10
QPD2-18000-40000-20-K	18~40	20/1	1	16	0.4/5	1.5	2.92mm	26*19*10
QPD2-18000-50000-20-2	18~50	20/1	1.6	18	0.4/5	1.6	2.4mm	21.6*26.9*12.7
QPD2-18000-65000-12-V	18~65	12/1	2.2	18	0.5/8	1.8	1.85mm	21.6*26.9*12.7
QPD2-18000-67000-12-V	18~67	12/1	2.3	18	0.6/8	1.8	1.85mm	21.6*26.9*12.7
QPD2-19000-33000-20-K	19~33	20/1	0.8	18	0.4/±4	1.5	2.92mm	19*26*10
QPD2-20000-22000-20-K	20~22	20/1	1	18	0.4/4	1.4	2.92mm	26*19*10
QPD2-20000-40000-20-K	20~40	20/1	1.2	16	0.4/5	1.5	2.92mm	26*19*10
QPD2-21000-26000-1-K	21~26	1/-	0.95	20	0.5/8	1.45	2.92mm	44*19*10
QPD2-23100-23300-10-K	23.1~23.3	10/-	0.8	18	0.3/3	1.5	2.92mm	26*19*10
QPD2-24000-30000-20-K	24~30	20/1	0.8	17	0.4/4	1.5	2.92mm	26*19*10
QPD2-24000-43500-20-K	24~43.5	20/1	1.3	16	0.4/5	1.7	2.92mm	26*19*10
QPD2-24250-52600-20-V	24.25~52.6	20/-	1.5	17	0.5/5	1.7	1.85mm	25.4*15.2*12.7
QPD2-25500-25600-1-K	25.5~25.6	1/-	0.8	18	0.3/3	1.5	2.92mm	26*19*10
QPD2-26000-31000-20-K	26~31	20/1	1	16	0.4/4	1.5	2.92mm	26*19*10
QPD2-26000-40000-20-K	26~40	20/1	1.2	16	0.4/4	1.5	2.92mm	26*19*10
QPD2-26000-54000-20-2	26~54	20/-	2	14	0.8/6	1.8	2.4mm	25.4*12.7*10
QPD2-26500-67000-12-V	26.5~67	12/1	2.1	18	0.6/8	1.8	1.85mm	25.4*15.2*10
QPD2-27000-52000-10-2	27~52	10/1	1.8	14	0.6/6	1.8	2.4mm	26*19*10
QPD2-37500-40200-20-V	37.5~40.2	20/1	1	17	0.4/5	1.6	1.85mm	26*19*10
QPD2-40000-67000-12-V	40~67	12/1	2.1	18	0.6/8	1.8	1.85mm	25.4*15.2*10

3-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD3-0-3000-2-S	DC~3	2/-	9.5±0.6	9.5	0.6/-	1.25	SMA	25.4*22.2*16
QPD3-0-6000-2-S	DC~6	2/-	11	9	0.7/10	1.4	SMA	29.3*25.4*16
QPD3-0-8000-2-S	DC~8	2/-	13.4	8.9	0.5/11	1.6	SMA	45*34*12.5
QPD3-1-300-1-S	0.001~0.3	1/-	1	20	0.4/4	1.35	SMA	38.1*25.4*10
QPD3-5-1000-50-S	0.005~1	50/50	1	12	0.3/5	1.5	SMA	60*80*22
QPD3-10-500-1-S	0.01~0.5	1/0.15	1.4	16	0.6/6	1.6	SMA	60*48*12
QPD3-80-300-20-S	0.08~0.3	20/1	1	18	0.4/5	1.3	SMA	186*102*12
QPD3-100-200-K1-N	0.1~0.2	100/10	0.5	18	0.3/3	1.25	N	305*120*22
QPD3-100-350-30-S	0.1~0.35	30/2	0.8	20	0.4/4	1.25	SMA	31.95*31.75*19.05
QPD3-100-400-30-N	0.1~0.4	30/2	0.6	18	0.5/5	1.3	N	228*108*20
QPD3-100-400-50-N	0.1~0.4	50/5	0.6	18	0.6/5	1.3	N	228*165*20
QPD3-100-800-1-S	0.1~0.8	1/1	1.5	20	0.4/5	1.35	SMA	38.1*25.4*10
QPD3-100-1000-30-S	0.1~1	30/2	1.8	18	0.8/8	1.35	SMA	186*72*14
QPD3-114-178-K3-N	0.114~0.178	300/50	1	20	0.5/6	1.3	N	280*172*22
QPD3-134-3700-30-N	0.134~3.7	30/2	3.8	18	0.9/10	1.5	N	280*68*20
QPD3-136-174-K3-N	0.136~0.174	300/20	0.8	20	0.3/3	1.25	N	326*172*22
QPD3-138-960-50-N	0.138~0.96	50/3	1.2	18	0.6/6	1.3	N	148*115*20
QPD3-200-250-30-S	0.2~0.25	30/2	1	20	0.4/4	1.25	SMA	164*64*14
QPD3-200-2000-30-S	0.2~2	30/2	0.6	12	0.8/3	1.3	SMA	50.8*82.55*20
QPD3-225-2500-20-S	0.225~2.5	20/1	1.8	20	0.8/8	1.4	SMA	136*56*12
QPD3-336-366-30-N	0.336~0.366	30/2	0.6	20	0.3/3	1.25	N	195*74*20
QPD3-380-470-K3-N	0.38~0.47	300/20	0.8	20	0.3/3	1.25	N	164*155*22
QPD3-380-40000-20-K	0.38~40	20/-	4.5	17	0.9/10	1.7	2.92mm	254*40.6*12.7
QPD3-400-1000-30-S	0.4~1	30/2	0.6	20	0.4/5	1.3	SMA	112*90*14
QPD3-400-2000-30-S	0.4~2	30/-	1.8	20	0.8/10	1.3	SMA	100*70*12
QPD3-400-6000-20-S	0.4~6	20/1	2.8	18	0.8/8	1.4	SMA	130*50*12
QPD3-400-6000-20-N	0.4~6	20/1	2.8	18	0.8/8	1.5	N	130*74*20
QPD3-433-30-30-N	0.433	30/2	0.5	22	0.3/3	1.2	N	100*70*20
QPD3-440-900-60-N	0.44~0.9	60/3	1	18	0.5/6	1.35	N	100*94*20
QPD3-480-500-30-N	0.48~0.5	30/2	0.3	20	0.3/3	1.2	N	90*78*20
QPD3-480-500-50-N	0.48~0.5	50/3	0.3	20	0.3/3	1.2	N	100*90*20
QPD3-500-700-K15-S	0.5~0.7	150/20	0.6	18	0.5/6	1.3	SMA	108*86*14
QPD3-500-3000-30-S	0.5~3	30/2	1	18	0.5/5	1.3	SMA	90*48*12
QPD3-500-6000-30-S	0.5~6	30/2	2.6	20	0.8/8	1.5	SMA	130*50*12
QPD3-500-6000-30-N	0.5~6	30/2	2.8	18	0.8/8	1.5	N	130*74*20
QPD3-500-8000-20-S	0.5~8	20/2	2.2	17	1/10	1.5	SMA	160*52*12
QPD3-500-18000-30-S	0.5~18	30/5	2.1	18	0.5/5	1.45	SMA	203.2*38.8*12.7
QPD3-500-26500-30-S	0.5~26.5	30/2	3	18	0.6/5	1.6	SMA	203.2*38.8*12.7
QPD3-500-40000-20-K	0.5~40	20/2	4.3	18	0.8/9	1.7	2.92mm	203.2*38.8*12.7
QPD3-555-3400-30-N	0.555~3.4	30/2	1	20	0.7/7	1.25	N	136*78*20
QPD3-600-6000-30-S	0.6~6	30/2	1	20	0.8/8	1.5	SMA	130*50*12
QPD3-600-6000-30-N	0.6~6	30/2	2.8	20	0.8/8	1.5	N	130*74*20
QPD3-698-2700-50-N	0.698~2.7	50/2	0.6	20	0.4/4	1.25	N	94*77*19
QPD3-698-6000-30-N	0.698~6	30/2	2	18	0.8/8	1.5	N	130*74*18
QPD3-700-1100-10-S	0.7~1.1	10/-	1	20	0.6/-	1.35	SMA	86.5*45*12
QPD3-700-4000-30-S	0.7~4	30/2	1.2	15	0.5/5	1.3	SMA	94*50*12
QPD3-700-4000-30-N	0.7~4	30/2	1.4	20	0.5/5	1.3	N	94*74*20
QPD3-700-5000-30-N	0.7~5	30/2	1.5	18	0.8/8	1.4	N	138*74*22
QPD3-800-1600-30-S	0.8~1.6	30/2	0.6	20	0.4/4	1.3	SMA	71*50*14
QPD3-800-2500-K2-7	0.8~2.5	200/-	0.5	20	0.3/4	1.2	7/16DIN	89*53*28

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD3-1000-2000-30-S	1~2	30/2	0.8	20	0.4/4	1.25	SMA	71*50*14
QPD3-1000-3000-30-N	1~3	30/2	1.2	20	0.5/5	1.3	N	94*72*20
QPD3-1000-18000-20-S	1~18	20/0.5	1.5	17	0.8/7	1.7	SMA	124*41*10
QPD3-1000-26500-30-S	1~26.5	30/2	2.1	16	0.8/7	1.7	SMA	145*40.8*12.7
QPD3-1100-1700-30-S	1.1~1.7	30/2	0.4	20	0.4/4	1.25	SMA	68*50*10
QPD3-1100-1700-30-T	1.1~1.7	30/2	0.5	20	0.4/4	1.25	TNC	72*72*20
QPD3-2000-3000-20-S	2~3	20/1	0.5	18	0.5/5	1.3	SMA	55*50*12
QPD3-2000-4000-20-S	2~4	20/1	0.5	18	0.5/5	1.3	SMA	55*50*12
QPD3-2000-8000-20-S	2~8	20/1	1	18	0.5/5	1.4	SMA	66.5*37.5*10
QPD3-2000-8000-20-N	2~8	20/1	1.2	18	0.5/6	1.4	N	76*70*20
QPD3-2000-9000-30-S	2~9	30/2	1.5	18	0.5/5	1.5	SMA	66.5*37.5*10
QPD3-2000-18000-20-S	2~18	20/1	1.6	16	0.6/10	1.7	SMA	70*39*10
QPD3-2000-26500-30-S	2~26.5	30/2	2	17	0.7/7	1.6	SMA	90*40.8*12.7
QPD3-2100-8400-20-N	2.1~8.4	20/1	1.6	18	0.6/6	1.15	N	66.5*70*20
QPD3-2400-2500-20-S	2.4~2.5	20/1	0.8	30	0.4/4	1.25	SMA	48*60*10
QPD3-3400-3800-30-N	3.4~3.8	30/2	0.5	20	0.5/5	1.25	N	78*68*20
QPD3-4950-4970-20-S	4.95~4.97	20/1	0.5	20	0.4/4	1.25	SMA	55*50*12
QPD3-6000-10000-20-S	6~10	20/1	1.2	18	0.6/6	1.5	SMA	51*38*10
QPD3-6000-18000-20-S	6~18	20/1	1.2	18	0.2/6	1..25	SMA	110*50*10
QPD3-6000-26500-30-S	6~26.5	30/2	1.4	18	0.6/7	1.6	SMA	43.2*38.1*12.7
QPD3-6000-40000-20-K	6~40	20/2	1.8	18	0.8/9	1.7	2.92mm	43.2*38.1*12.7
QPD3-6000-50000-20-2	6~50	20/1	2.4	18	0.9/11	1.8	2.4mm	43.2*38.1*12.7
QPD3-7000-8000-20-S	7~8	20/1	1	20	0.4/4	1.3	SMA	66.5*37.5*10
QPD3-8000-12000-20-S	8~12	20/1	1	18	0.5/5	1.4	SMA	51*38*10
QPD3-9000-11000-20-S	9~11	20/1	0.8	18	0.5/5	1.4	SMA	51*38*10
QPD3-16000-18000-20-S	16~18	20/1	0.8	18	0.5/5	1.4	SMA	51*38*10
QPD3-17000-32000-20-K	17~32	20/1	2	15	0.8/10	1.8	2.92mm	39*25.4*10
QPD3-18000-26500-30-S	18~26.5	30/2	1.4	18	0.5/6	1.6	SMA	43.2*38.1*12.7
QPD3-18000-40000-20-K	18~40	20/2	1.8	18	0.7/8	1.7	2.92mm	43.2*38.1*12.7
QPD3-18000-50000-20-2	18~50	20/1	2.4	18	0.9/11	1.8	2.4mm	43.2*38.1*12.7
QPD3-24000-44000-20-2	24~44	20/1	2	20	0.8/9	1.7	2.4mm	43.2*38.1*12.7
QPD3-26000-31000-20-K	26~31	20/1	1.5	16	0.6/6	1.5	2.92mm	39*25.4*10
QPD3-26500-40000-20-K	26.5~40	20/2	1.8	18	0.6/7	1.7	2.92mm	43.2*38.1*12.7
QPD3-26500-50000-20-2	26.5~50	20/1	2.4	18	0.8/10	1.8	2.4mm	43.2*38.1*12.7

4-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD4-0-1000-2-S	DC~1	2/-	12.8	11.8	0.5/8	1.2	SMA	25.4*22.2*16
QPD4-0-3000-2-S	DC~3	2/-	13	12	0.6/10	1.3	SMA	25.4*22.2*16
QPD4-0-4000-2-S	DC~4	2/-	13.5	11	0.7/15	1.4	SMA	25.4*22.2*16
QPD4-0-6000-2-S	DC~6	2/-	12±1.0	12	0.8/12	1.4	SMA	25.4*22.2*16
QPD4-0-6000-2-N	DC~6	2/-	13	12	0.8/12	1.5	N	44*38.1*20
QPD4-0-8000-2-S	DC~8	2/-	12±1.5	12	0.8/-	1.5	SMA	25.4*22.2*16
QPD4-0-10000-R5-S	DC~10	0.5/-	12±2.0	-	1/-	1.5	SMA	54*32*12
QPD4-0-10000-R1-S	DC~10	0.1/-	12±2	-	-/-	1.5	SMA	54*32*12
QPD4-0-18000-R5-S	DC~18	0.5/-	12±2.8	-	-/-	1.8	SMA	31.95*31.75*19.05

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD4-0-26500-1-S	DC~26.5	1/-	15.6	9	0.8/-	2.6	SMA	34*55*10
QPD4-0-40000-1-K	DC~40	1/-	15.6	8	0.8/-	2.6	2.92mm	33.8*50.5*10
QPD4-0.5-50-1K-N	0.0005~0.05	1K/-	0.35	20	-/-	1.3	N	168*204*74
QPD4-3-30-2K-N	0.003~0.03	2K/2K	0.35	20	-/-	1.25	N	168*204*74
QPD4-4-30-3K-N	0.004~0.03	3K/3K	0.35	20	-/-	1.25	N	200*185*165
QPD4-4-30-20K-NA1	0.004~0.03	20K/20K	0.5	20	-/-	1.4	N, IF70	692*609*266
QPD4-5-30-50K-A1A2	0.005~0.03	50K/50K	0.5	20	-/-	1.45	IF70, IF110F	785*780*400
QPD4-5-1000-1-S	0.005~1	1/0.5	2	16	0.2/1	1.4	SMA	54*40*12
QPD4-5-1000-1-N	0.005~1	1/0.5	2	16	0.2/1	1.5	N	90*40*20
QPD4-10-100-R5-S	0.01~0.1	0.5/0.375	1.2	18	0.4/4	1.4	SMA	108*40*12
QPD4-10-100-R5-B	0.01~0.1	0.5/0.375	1.5	18	0.6/4	1.3	BNC	108*40*22
QPD4-10-500-20-S	0.01~0.5	20/-	1.2	20	0.4/4	1.4	SMA	56*35*12.7
QPD4-10-500-K1-S	0.01~0.5	100/-	0.7	12	0.2/5	1.6	SMA	100*78*30
QPD4-20-500-K1-S	0.02~0.5	100/100	1	15	0.3/5	1.6	SMA	100*100*26
QPD4-40-900-R5-N	0.04~0.9	0.5/0.375	1.8	18	0.8/4	1.4	N	108*40*22
QPD4-70-2000-30-B	0.07~2	30/2	5.8	18	0.4/4	1.3	BNC	208*178*18
QPD4-80-500-30-S	0.08~0.5	30/2	11.5	20	0.2/3	1.25	SMA	170*110*12
QPD4-80-1000-K5-N	0.08~1	500/-	0.9	12	0.2/5	1.35	N	110*125*35
QPD4-80-1000-K75-N	0.08~1	750/750	0.6	15	0.3/5	1.35	N	120*120*40
QPD4-100-400-30-S	0.1~0.4	30/2	1	20	0.3/3	1.25	SMA	120*128*10
QPD4-100-500-50-S	0.1~0.5	50/3	0.8	20	0.2/3	1.25	SMA	252*126*14
QPD4-100-500-50-N	0.1~0.5	50/3	1	20	0.2/3	1.25	N	252*126*22
QPD4-100-500-K3-N-20	0.1~0.5	300/20	0.8	20	0.2/3	1.25	N	270*224*22
QPD4-100-500-K3-N-K1	0.1~0.5	300/100	0.8	20	0.2/3	1.25	N	270*224*24
QPD4-100-500-K5-7	0.1~0.5	500/100	0.6	20	0.2/2	1.3	7/16DIN	284*228*35
QPD4-100-520-2K-7N	0.1~0.52	2K/2K	0.6	15	0.3/5	1.35	7/16DIN&N	150*120*45
QPD4-100-1000-30-S	0.1~1	30/2	1.8	18	0.3/4	1.25	SMA	120*118*10
QPD4-100-2000-30-S	0.1~2	30/2	3.4	20	0.3/4	1.3	SMA	156*118*10
QPD4-100-3000-30-S	0.1~3	30/2	5.6	18	0.3/4	1.3	SMA	226*90*12
QPD4-106-176-K1-N	0.106~0.176	100/-	0.3	20	0.1/1	1.25	N	215.9*177.8*20.32
QPD4-118-138	0.118~0.138	500/200	0.5	25	0.2/2	1.2	N	278*175*20
QPD4-120-150-50-N	0.12~0.15	50/3	0.5	20	0.2/3	1.2	N	168*162*20
QPD4-120-560-50-N	0.12~0.56	50/3	1	20	0.2/3	1.2	N	202*142*20
QPD4-134-3700-30-N	0.134~3.7	30/2	4.2	18	0.4/4	1.4	N	215*96*20
QPD4-136-174-K3-N	0.136~0.174	300/25	0.4	20	0.2/2	1.2	N	255*208*22
QPD4-138-960-50-N	0.138~0.96	50/3	1	18	0.2/3	1.25	N	172*132*20
QPD4-150-960-50-N	0.15~0.96	50/2	1.4	20	0.4/4	1.4	N	214*132*20
QPD4-150-2500-30-S	0.15~2.5	30/2	2.8	18	0.3/4	1.25	SMA	142*102*10
QPD4-200-250-30-S	0.2~0.25	30/2	0.5	20	0.3/3	1.2	SMA	118*112*14
QPD4-200-500-K3-N	0.2~0.5	300/30	0.5	20	0.3/3	1.2	N	255*150*20
QPD4-200-2000-30-S	0.2~2	30/2	1.6	20	0.3/3	1.3	SMA	114*80*12
QPD4-200-4000-30-S	0.2~4	30/2	3	20	0.3/4	1.35	SMA	130*72*10
QPD4-200-6000-20-S	0.2~6	20/1	4	20	0.3/4	1.45	SMA	140*90*10
QPD4-225-400-K1-N	0.225~0.4	100/-	0.35	20	0.1/1	1.25	N	172.72*132.08*20.32
QPD4-240-270-K2-S	0.24~0.27	200/200	0.5	20	0.2/5	1.35	SMA	100*100*26
QPD4-245-255-K1-S	0.245~0.255	100/1	0.5	25	0.2/3	1.25	SMA	88*53*10
QPD4-250-6000-30-S	0.25~6	30/2	3.5	18	0.3/4	1.3	SMA	127*86*12
QPD4-300-1000-K3-N	0.3~1	300/30	0.4	18	0.3/3	1.25	N	230*124*20
QPD4-300-3000-30-S	0.3~3	30/2	1.2	20	0.3/4	1.3	SMA	93*85*12
QPD4-300-6000-30-S	0.3~6	30/2	2.5	20	0.3/4	1.35	SMA	108*92*12
QPD4-300-18000-30-S	0.3~18	30/5	5.9	18	0.4/5	1.5	SMA	254*56.5*12.7
QPD4-300-26500-30-S	0.3~26.5	30/2	8.3	18	0.5/6	1.6	SMA	254*56.5*12.7
QPD4-350-800-50-N	0.35~0.8	50/10	0.5	18	0.3/3	1.25	N	106*104*20
QPD4-350-830-K15-B	0.35~0.83	150/15	0.8	20	0.3/3	1.3	BNC	202*116*20
QPD4-350-3800-30-S	0.35~3.8	30/2	1.6	18	0.3/4	1.3	SMA	102*68*12
QPD4-350-3800-30-N	0.35~3.8	30/2	1.8	18	0.3/4	1.3	N	102*91*20
QPD4-380-460-K1-7	0.38~0.46	100/-	0.5	20	0.3/3	1.25	7/16DIN	150*118*30
QPD4-380-470-K3-N	0.38~0.47	300/25	0.4	20	0.2/2	1.2	N	184*148*22
QPD4-380-8000-30-S	0.38~8	30/2	2.6	18	0.3/4	1.35	SMA	130*58*10
QPD4-400-470-30-S	0.4~0.47	30/2	0.5	20	0.3/3	1.25	SMA	114*110*14
QPD4-400-500-10-S	0.4~0.5	10/-	0.7	20	0.4/7	1.3	SMA	94*65*11

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD4-400-1000-30-N	0.4~1	30/2	0.5	20	0.3/3	1.25	N	114*110*22
QPD4-400-1000-K1-N	0.4~1	100/10	0.5	20	0.3/3	1.25	N	150*110*22
QPD4-400-1000-K2-N	0.4~1	200/20	0.6	18	0.3/3	1.3	N	160*125*22
QPD4-400-2000-30-S	0.4~2	30/2	1	20	0.3/3	1.2	SMA	87*72*12
QPD4-400-4000-30-S	0.4~4	30/2	1.6	20	0.3/4	1.3	SMA	88*70*12
QPD4-400-6000-30-S	0.4~6	30/2	1.6	20	0.1/3	1.3	SMA	104*62*12
QPD4-400-6000-30-N	0.4~6	30/2	2	18	0.3/4	1.3	N	100*82*20
QPD4-400-6000-35-S	0.4~6	35/2.5	2.2	20	0.3/4	1.3	SMA	208*64*12
QPD4-400-8000-30-S	0.4~8	30/2	2.5	20	0.3/4	1.4	SMA	132*64*12
QPD4-400-8000-30-N	0.4~8	30/2	3.6	18	0.3/4	1.4	N	132*86*20
QPD4-450-6000-30-S	0.45~6	30/2	2.4	20	0.2/4	1.3	SMA	112*64*12
QPD4-500-1000-30-S	0.5~1	30/2	0.6	20	0.3/3	1.3	SMA	65*63*12
QPD4-500-1000-30-N	0.5~1	30/2	0.8	22	0.3/3	1.3	N	97*44*20
QPD4-500-2000-30-S	0.5~2	30/2	1	20	0.3/4	1.25	SMA	68*64*12
QPD4-500-3000-30-S	0.5~3	30/2	1	20	0.3/4	1.2	SMA	82*65*12
QPD4-500-4000-K1-S	0.5~4	100/5	3.8	18	0.3/4	1.4	SMA	200*86*16
QPD4-500-4000-K1-N	0.5~4	100/10	2	18	0.3/4	1.4	N	182*98*20
QPD4-500-6000-30-S	0.5~6	30/2	1.8	20	0.1/2	1.3	SMA	100*62*12
QPD4-500-6000-30-N	0.5~6	30/2	2	20	0.1/2	1.3	N	100*92*20
QPD4-500-18000-30-S	0.5~18	30/1	2.5	15	0.8/8	2	SMA	163*68*10
QPD4-500-26500-20-S	0.5~26.5	20/1	5.2	16	0.4/6	1.6	SMA	158*56.5*12.7
QPD4-500-40000-20-K	0.5~40	20/-	7.5	15	0.5/7	1.7	2.92mm	158.5*56.5*12.7
QPD4-555-3400-30-N	0.555~3.4	30/2	1.2	18	0.3/4	1.25	N	112*110*20
QPD4-600-2000-30-S	0.6~2	30/2	0.8	20	0.3/3	1.25	SMA	72*62*12
QPD4-600-3000-50-S	0.6~3	50/3	1	18	0.3/4	1.3	SMA	108*85*12
QPD4-600-3600-K1-S	0.6~3.6	100/5	2	10	0.3/4	1.3	SMA	128*85*12
QPD4-600-8000-30-S	0.6~8	30/2	2.2	20	0.3/4	1.3	SMA	110*58*10
QPD4-698-2700-50-N	0.698~2.7	50/3	0.8	18	0.3/4	1.3	N	123*106*20
QPD4-698-4000-50-N	0.698~4	50/3	2	20	0.3/4	1.25	N	134*96*20
QPD4-698-4000-50-4	0.698~4	50/3	1.5	20	0.3/4	1.3	4.3-10	178*128*30
QPD4-700-1100-30-S	0.7~1.1	30/2	0.4	22	0.3/3	1.2	SMA	66*66*12
QPD4-700-2000-30-N	0.7~2	30/2	0.6	20	0.3/3	1.2	N	100*45*20
QPD4-700-2700-30-S	0.7~2.7	30/2	0.8	20	0.1/1	1.3	SMA	60*58*12
QPD4-700-3000-30-S	0.7~3	30/2	0.8	20	0.3/4	1.2	SMA	72*60*12
QPD4-700-4000-30-S	0.7~4	30/2	1	20	0.3/3	1.3	SMA	66*66*12
QPD4-700-4000-30-N	0.7~4	30/2	1	20	0.4/4	1.3	N	98*74*20
QPD4-700-4700-30-N	0.7~4.7	30/2	1.6	20	0.3/4	1.3	N	100*92*20
QPD4-700-5000-30-N	0.7~5	30/2	2	18	0.3/5	1.4	N	130*130*22
QPD4-750-1710-30-S	0.75~1.71	30/2	0.4	20	0.3/3	1.2	SMA	64*52*12
QPD4-800-2500-30-S	0.8~2.5	30/2	0.5	20	0.2/0.5	1.3	SMA	58*50*12
QPD4-800-2700-30-S	0.8~2.7	30/2	0.6	20	0.3/4	1.25	SMA	64*52*12
QPD4-800-3100-K6-N	0.8~3.1	600/-	0.65	-	0.3/5	1.3	N	127*110.5*20
QPD4-800-4200-K2-N	0.8~4.2	200/5	1.8	18	0.4/4	1.4	N	152*108*20
QPD4-800-5000-20-S	0.8~5	20/1	1	18	0.15/2	1.3	SMA	120*72*12
QPD4-850-2150-30-N	0.85~2.15	30/2	0.6	22	0.3/3	1.2	N	56*34*12
QPD4-950-2150-30-S	0.95~2.15	30/2	0.6	25	0.6/1	1.25	SMA	64*56*12
QPD4-950-2150-30-N	0.95~2.15	30/2	0.6	25	0.6/1	1.25	N	100*50*20
QPD4-950-2150-30-S-DC	0.95~2.15	30/2	0.6	20	0.3/3	1.2	SMA	102*72*15
QPD4-950-2150-30-N-DC	0.95~2.15	30/2	0.6	20	0.3/3	1.2	N	102*72*20
QPD4-1000-2000-30-S	1~2	30/2	0.6	25	0.3/3	1.3	SMA	64*52*12
QPD4-1000-2000-30-N	1~2	30/2	0.8	20	0.3/3	1.3	N	97*44*20
QPD4-1000-2500-K1-N	1~2.5	100/10	0.6	18	0.3/4	1.35	N	118*110*22
QPD4-1000-2500-K1-NS	1~2.5	100/10	0.6	18	0.3/4	1.35	N&SMA	118*110*22
QPD4-1000-3000-30-S	1~3	30/2	0.9	24	0.2/3	1.25	SMA	56*43*10
QPD4-1000-4000-30-S	1~4	30/2	0.8	20	0.3/3	1.3	SMA	56*43*10
QPD4-1000-6000-30-S	1~6	30/2	1.2	20	0.3/4	1.3	SMA	60*55*12
QPD4-1000-8000-30-S	1~8	30/2	1.5	20	0.4/5	1.4	SMA	70.5*56*10
QPD4-1000-18000-20-S	1~18	20/1	3	16	0.5/6	1.55	SMA	99*71*10
QPD4-1000-26500-20-S	1~26.5	20/1	3	16	0.5/6	1.5	SMA	110.5*74*10
QPD4-1000-40000-20-K	1~40	20/1	4.8	16	0.5/7	1.7	2.92mm	110.5*74*10
QPD4-1000-50000-20-2	1~50	20/2	5.9	16	0.7/9	1.7	2.4mm	108*56.5*12.7

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD4-1100-1700-20-B	1.1~1.7	30/2	0.5	20	0.3/3	1.2	BNC	102*72*20
QPD4-1100-1700-20-T	1.1~1.7	30/2	0.5	20	0.3/3	1.2	TNC	102*72*20
QPD4-1100-1700-20-N	1.1~1.7	30/2	0.5	20	0.3/3	1.2	N	102*72*20
QPD4-1100-2700-K1-S	1.1~2.7	100/10	0.6	18	0.3/4	1.25	SMA	110*100*11
QPD4-1300-2400-30-S	1.3~2.4	30/2	0.9	22	0.1/1	1.2	SMA	50*48*20
QPD4-1900-5800-30-S	1.9~5.8	30/2	0.5	20	0.3/4	1.25	SMA	56*50*12
QPD4-2000-2400-30-N	2~2.4	30/2	0.5	20	0.3/3	1.25	N	97*40*20
QPD4-2000-4000-30-S	2~4	30/2	0.6	20	0.3/3	1.25	SMA	56*50*10
QPD4-2000-4000-30-N	2~4	30/2	0.8	20	0.3/3	1.25	N	97*49*20
QPD4-2000-6000-30-S	2~6	30/2	0.6	22	0.3/4	1.25	SMA	56*50*12
QPD4-2000-6000-30-N	2~6	30/2	1	20	0.3/4	1.25	N	97*49*20
QPD4-2000-6000-50-S	2~6	50/2.5	1.5	18	0.3/4	1.35	SMA	94*60*10
QPD4-2000-8000-30-S	2~8	30/2	0.9	20	0.3/1	1.4	SMA	58*50*12
QPD4-2000-8000-30-N	2~8	30/2	0.9	20	0.3/1	1.4	N	43*35*14
QPD4-2000-9000-30-S	2~9	30/2	1.8	18	0.3/4	1.4	SMA	56*56*10
QPD4-2000-12000-20-S	2~12	20/1	1.6	17	0.4/5	1.5	SMA	69*60*10
QPD4-2000-18000-20-S	2~18	20/1	2	17	0.4/6	1.5	SMA	69*60*10
QPD4-2000-18000-20-N	2~18	20/1	2.2	17	0.4/6	1.6	N	102*60*20
QPD4-2000-26500-20-S	2~26.5	20/1	2.6	16	0.5/6	1.7	SMA	73*59*10
QPD4-2000-40000-20-K	2~40	20/1	3	15	0.5/10	2.1	2.92mm	52*46*10
QPD4-2000-50000-20-2	2~50	20/1	4.8	16	0.6/10	1.7	2.4mm	79.2*51.6*12.7
QPD4-2400-5900-50-N	2.4~5.9	50/3	0.6	18	0.2/3	1.3	N	110*70*22
QPD4-2400-5900-K1-N	2.4~5.9	100/10	1	18	0.3/4	1.25	N	108*110*22
QPD4-2400-6000-K1-N	2.4~6	100/10	1.2	18	0.3/4	1.3	N	110*108*22
QPD4-2400-6000-K1-NS	2.4~6	100/10	1.2	18	0.3/4	1.3	N&SMA	110*108*22
QPD4-2500-4000-K2-N	2.5~4	200/20	1	18	0.3/4	1.35	N	108*102*22
QPD4-2600-3500-K15-N	2.6~3.5	150/10	0.5	18	0.2/3	1.25	N	115*104*22
QPD4-3000-5000-K1-N	3~5	100/10	0.8	18	0.3/4	1.25	N	110*108*22
QPD4-3400-3800-30-N	3.4~3.8	30/2	0.5	18	0.2/3	1.25	N	110*63*20
QPD4-3400-3800-K1-N	3.4~3.8	100/10	0.6	20	0.2/3	1.25	N	110*102*20
QPD4-3400-4800-30-SN	3.4~4.8	30/2	0.8	25	0.3/3	1.25	SMA&N	105*50*20
QPD4-4000-8000-30-S	4~8	30/2	0.6	20	0.3/3	1.3	SMA	55*36*10
QPD4-4000-12000-20-S	4~12	20/1	1.2	18	0.2/4	1.4	SMA	60*54*10
QPD4-4000-18000-20-S	4~18	20/1	2	17	0.4/6	1.5	SMA	60*69*10
QPD4-5400-6800-20-S	5.4~6.8	20/1	0.6	20	0.4/4	1.3	SMA	35*52*10
QPD4-5500-6000-30-SM	5.5~6	30/2	0.6	20	0.3/4	1.3	SMA	56*43*10
QPD4-6000-11000-20-S	6~11	20/1	1	18	0.3/4	1.3	SMA	60*58*10
QPD4-6000-18000-20-S	6~18	20/1	1.2	18	0.3/6	1.5	SMA	50.5*45*10
QPD4-6000-18000-50-SMS	6~18	50/-	1.5	18	0.4/5	1.6	SMA	85*45*10
QPD4-6000-18000-K1-S	6~18	100/-	1.5	15	0.4/5	1.6	SMA	85*50*10
QPD4-6000-26500-30-S	6~26.5	30/2	1.9	18	0.4/4	1.6	SMA	51.7*38.1*12.7
QPD4-6000-40000-20-K	6~40	20/1	3	16	0.5/6	1.6	2.92mm	50*46*10
QPD4-6000-50000-20-2	6~50	20/1	3.4	18	0.6/7	1.7	2.4mm	51.7*38.1*12.7
QPD4-6900-7400-30-S	6.9~7.4	30/2	0.5	20	0.3/3	1.25	SMA	60*36*10
QPD4-7000-8500-30-S	7~8.5	30/2	0.6	20	0.3/3	1.3	SMA	60*36*10
QPD4-7000-9000-K2-S	7~9	200/200	0.8	17	0.5/5	1.4	SMA	114*45*10
QPD4-7000-9000-30-S	7~9	30/2	0.6	18	0.2/3	1.3	SMA	60*36*10
QPD4-8000-12000-20-S	8~12	20/1	1	18	0.4/5	1.4	SMA	60*54*10
QPD4-8000-30000-20-K	8~30	20/1	1.6	16	0.4/4	1.5	2.92mm	52*35*10
QPD4-10000-26500-20-K	10~26.5	20/1	1.2	16	0.4/6	1.5	2.92mm	52*35*10
QPD4-10000-40000-20-K	10~40	20/1	1.5	16	0.4/6	1.5	2.92mm	52.3*38.1*10
QPD4-10700-12750-20-S	10.7~12.75	20/1	1	18	0.4/5	1.4	SMA	54*48*10
QPD4-10900-12700-20-S	10.9~12.7	20/1	1	18	0.4/5	1.4	SMA&N	60*50*10
QPD4-10900-12700-20-N	10.9~12.7	20/1	1	18	0.4/5	1.4	SMA&N	97*49*20
QPD4-12000-15000-20-S	12~15	20/1	1	18	0.3/4	1.4	SMA	54*50*10
QPD4-13750-14500-20-S	13.75~14.5	20/1	1	18	0.4/5	1.4	SMA	60*50*10
QPD4-13750-14500-20-N	13.75~14.5	20/1	1	18	0.4/5	1.4	N	97*49*20
QPD4-15000-17000-20-S	15~17	20/1	1.2	18	0.4/4	1.4	SMA	54*48*10
QPD4-18000-26500-20-K	18~26.5	20/1	1.6	16	0.4/6	1.6	2.92mm	52.3*38.1*10
QPD4-18000-40000-20-K	18~40	20/1	1.5	16	0.4/6	1.5	2.92mm	52.3*38.1*10
QPD4-18000-50000-20-2	18~50	20/1	2.5	15	0.6/10	1.8	2.4mm	52*24*10

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD4-19000-33000-20-K	19~33	20/1	1.5	18	0.4/5	1.5	2.92mm	52*35*10
QPD4-24000-30000-20-K	24~30	20/1	1	16	0.4/6	1.5	2.92mm	52.3*38.1*10
QPD4-24000-40000-20-K	24~40	20/1	1.6	16	0.4/8	1.8	2.92mm	52*35*10
QPD4-24500-25500-1-K	24.5~25.5	1/-	1.5	20	0.7/10	1.5	2.92mm	70*35*10
QPD4-25000-50000-20-V	25~50	20/1	2	15	0.6/10	1.8	1.85mm	52*24*10
QPD4-26000-31000-20-K	26~31	20/1	1.4	16	0.4/6	1.5	2.92mm	52*35*10
QPD4-34000-36000-20-K	34~36	20/1	1.4	16	0.4/5	1.5	2.92mm	52.3*38.1*10
QPD4-40000-67000-12-V	40~67	12/1	3.8	16	0.8/10	1.9	1.85mm	51.7*25.4*12.7

5-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD5-0-3000-2-S	DC~3	2/-	17.5	15	0.8/-	1.25	SMA	25.4*29.3*16
QPD5-500-18000-30-S	0.5~18	30/5	4.5	16	0.8/8	1.5	SMA	250*72.7*12.7
QPD5-2000-4000-20-S	2~4	20/1	1	18	0.8/8	1.3	SMA	100*80*12
QPD5-2000-18000-30-S	2~18	30/5	1.6	18	0.7/8	1.6	SMA	145*64.6*12.7
QPD5-2000-26500-30-S	2~26.5	30/2	2.2	18	0.9/10	1.6	SMA	145*64.6*12.7
QPD5-2400-2700-50-S	2.4~2.7	50/3	1.2	18	0.6/6	1.4	SMA	130*92*16
QPD5-6000-18000-30-S	6~18	30/5	1.4	16	0.6/7	1.6	SMA	93*68.6*12.7
QPD5-6000-26500-30-S	6~26.5	30/2	1.8	16	0.8/8	1.6	SMA	93*68.6*12.7
QPD5-6000-40000-20-K	6~40	20/2	2.5	15	0.1/10	1.7	2.92mm	93*68.6*12.7
QPD5-18000-26500-30-S	18~26.5	30/2	1.8	16	0.7/8	1.6	SMA	93*68.6*12.7
QPD5-18000-40000-20-K	18~40	20/2	2.5	16	1/10	1.7	2.92mm	93*68.6*12.7
QPD5-24000-44000-20-2	24~44	20/1	2.8	16	1/10	1.8	2.4mm	73*68.6*12.7
QPD5-26500-40000-20-K	26.5~40	20/2	2.5	16	0.8/10	1.8	2.92mm	73*68.6*12.7

6-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD6-0-1000-1-S	DC~1	1/-	16±1.5	16	0.6/-	1.2	SMA	33.7*32.9*16
QPD6-0-4000-2-N	DC~4	2/-	16.5±1.5	15	1/-	1.4	N	47.19*46*20
QPD6-0-6000-2-S	DC~6	2/-	17	15	1.5/-	1.5	SMA	31.5*30.7*14
QPD6-0-8000-2-S	DC~8	2/-	18	15	2/-	1.5	SMA	31.5*30.7*14
QPD6-0-10000-R5-S	DC~10	0.5/-	16±3.5	-	3/-	1.7	SMA	80*40*12
QPD6-1-200-2-S	0.001~0.2	2/-	15.9	14.6	0.3/3	1.2	SMA	92*44*12.5
QPD6-2-250-2-S	0.002~0.25	2/-	1.3	20	0.6/5	1.65	SMA	10*9.65*6.73
QPD6-300-5000-1-S	0.3~5	1/-	18	14.5	2/-	1.5	SMA	33.7*32.9*16
QPD6-300-18000-30-S	0.3~18	30/5	6.3	18	0.7/8	1.6	SMA	299.7*78*12.7
QPD6-400-500-10-S	0.4~0.5	10/-	1.2	20	0.7/10	1.3	SMA	142*85*11
QPD6-400-4000-30-SN	0.4~4	30/2	3	18	0.9/10	1.3	SMA&N	138*132*20
QPD6-500-3000-30-S	0.5~3	30/2	2.6	18	1.5/20	1.5	SMA	118*105*12
QPD6-500-6000-30-S	0.5~6	30/1	2.2	18	0.8/8	1.3	SMA	115*85*10
QPD6-500-6000-30-N	0.5~6	30/2	4	18	1/10	1.5	N	150*142*20
QPD6-500-8000-20-S	0.5~8	20/2	3.5	17	1/10	1.55	SMA	220*94*12
QPD6-500-18000-30-S	0.5~18	30/5	4.5	18	0.7/8	1.6	SMA	265*82.3*12.7
QPD6-700-2700-40-S	0.7~2.7	40/2.5	1	20	0.5/6	1.3	SMA	124*98*12
QPD6-700-4000-30-S	0.7~4	30/2	1.6	18	0.8/8	1.4	SMA	110*80*12
QPD6-800-2500-20-S	0.8~2.5	20/1	1	20	0.4/5	1.3	SMA	88*85*14
QPD6-800-2700-30-N	0.8~2.7	30/2	1.4	18	0.5/6	1.35	N	150*95*20
QPD6-800-3000-20-S	0.8~3	20/1	1.2	20	0.5/5	1.35	SMA	88*85*12
QPD6-900-6100-20-S	0.9~6.1	20/1	3	20	0.8/8	1.5	SMA	138*94*10
QPD6-1000-1700-30-S	1~1.7	30/2	1	20	0.4/5	1.3	SMA	85*65*12
QPD6-1000-1700-30-N	1~1.7	30/2	1	20	0.4/4	1.3	N	155*98*20
QPD6-1000-1700-30-T	1~1.7	30/2	1	20	0.4/4	1.3	TNC	155*98*20
QPD6-1000-2000-30-N	1~2	30/2	1.2	20	0.5/5	1.3	N	156*76*20

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD6-1000-8000-20-S	1~8	20/1	1.8	18	0.5/6	1.5	SMA	130*80*10
QPD6-1500-5000-20-S	1.5~5	20/1	1	18	0.4/5	1.35	SMA	88*83*10
QPD6-2000-6000-30-S	2~6	30/2	1	20	0.5/6	1.35	SMA	88*83*10
QPD6-2000-8000-30-S	2~8	30/2	1.2	20	0.5/6	1.35	SMA	88*83*10
QPD6-2000-18000-20-S	2~18	20/1	2.6	16	0.6/8	1.5	SMA	109*76*10
QPD6-2000-26500-30-S	2~26.5	30/2	3	18	0.8/8	1.6	SMA	98*82.5*12.7
QPD6-3700-4900-20-SP	3.7~4.9	20/1	0.5	20	0.3/1.2	1.25	SMA&SMP	66*58*10
QPD6-4000-8000-30-S	4~8	30/2	1	20	0.5/5	1.4	SMA	83*68*10
QPD6-6000-10000-20-S	6~10	20/1	1.5	18	0.8/8	1.6	SMA	109*76*10
QPD6-6000-18000-30-S	6~18	30/1	1.8	16	0.8/10	1.8	SMA	75.5*50*10
QPD6-6000-26500-30-S	6~26.5	30/2	1.8	18	0.6/8	1.6	SMA	88.9*45.7*12.7
QPD6-6000-40000-20-K	6~40	20/2	2.8	18	0.9/11	1.7	2.92mm	88.9*45.7*12.7
QPD6-8000-17000-20-S	8~17	20/-	1.5	18	0.8/8	1.7	SMA	70.5*50*10
QPD6-18000-26500-30-S	18~26.5	30/2	1.8	18	0.5/7	1.6	SMA	88.9*45.7*12.7
QPD6-18000-40000-20-K	18~40	20/2	2.8	18	0.8/10	1.7	2.92mm	88.9*45.7*12.7
QPD6-24000-44000-20-2	24~44	20/1	3.4	18	0.8/10	1.7	2.4mm	88.9*45.7*12.7
QPD6-26500-40000-20-K	26.5~40	20/2	2.8	18	0.7/9	1.7	2.92mm	88.9*45.7*12.7

8-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD8-0-2000-2-N	DC~2	2/-	19	17.5	0.5/1	1.25	N	200*60*20
QPD8-0-2000-2-S	DC~2	2/-	19	17.5	0.3/3	1.15	SMA	120*60*12
QPD8-0-3000-2-S	DC~3	2/-	18±1.5	18	1/-	1.3	SMA	43.2*42.5*16
QPD8-0-3000-2-N	DC~3	2/-	19.5	18.5	0.5/2	1.3	N	60.47*59.55*20
QPD8-0-4000-2-S	DC~4	2/-	19.5	17	0.8/8	1.4	SMA	120*60*12
QPD8-0-6000-2-S	DC~6	2/-	18±2.5	18	1.2/-	1.5	SMA	43.2*42.5*16
QPD8-0-8000-2-S	DC~8	2/-	20±1.5	18	1.8/-	1.6	SMA	43.2*42.5*16
QPD8-0-10000-R5-S	DC~10	0.5/-	18±2.8	-	2/-	1.6	SMA	106*50*12
QPD8-0-18000-1-S	DC~18	1/-	23	10	1.2/12	2.5	SMA	92.5*60.18*10
QPD8-2-250-1-S	0.002~0.25	1/-	1	25	0.2/2	1.3	SMA	101.6*31.75*9.65
QPD8-5-500-10-N	0.005~0.5	10/-	1.5	20	0.3/5	1.25	N	180*50*22
QPD8-5-1000-1-S	0.005~1	1/0.5	3	18	0.5/10	1.5	SMA	120*32*13
QPD8-5-1000-50-S	0.005~1	50/50	1.6	12	0.2/5	1.5	SMA	164*126*26
QPD8-10-100-1-S	0.01~0.1	1/0.5	1	20	0.4/4	1.3	SMA	120*32*13
QPD8-20-100-K15-S	0.02~0.1	150/150	1.3	20	0.2/5	1.5	SMA	164*126*26
QPD8-30-3000-2-S	0.03~3	2/-	18.5	17	0.5/5	1.3	SMA	120*60*12
QPD8-80-500-30-S	0.08~0.5	30/2	1.8	18	0.2/3	1.3	SMA	202*166*10
QPD8-80-1000-K2-S	0.08~1	200/200	1.3	15	0.2/5	1.35	SMA	164*126*26
QPD8-80-4000-30-S	0.08~4	30/2	6.6	13	0.4/8	1.55	SMA	332*164*12
QPD8-98-102-30-N	0.098~0.102	30/2	0.8	20	0.2/3	1.2	N	215*168*20
QPD8-100-700-1-S	0.1~0.7	1/0.5	2	18	0.4/8	1.5	SMA	120*32*13
QPD8-100-700-30-S	0.1~0.7	30/2	2	20	0.3/3	1.25	SMA	190*190*12
QPD8-100-2000-30-S	0.1~2	30/2	3.4	18	0.3/4	1.35	SMA	224*220*10
QPD8-100-3000-30-S	0.1~3	30/2	6.5	18	0.3/6	1.35	SMA	322*170*10
QPD8-100-4000-30-SMS	0.1~4	30/2	6.5	12	0.5/6	1.55	SMA	252*158*10
QPD8-200-1000-30-S	0.2~1	30/2	1.4	20	0.4/4	1.25	SMA	172*138*12
QPD8-200-1000-K1-S	0.2~1	100/10	1	20	0.3/4	1.25	SMA	364*208*14
QPD8-200-2000-30-S	0.2~2	30/2	2.8	18	0.3/4	1.3	SMA	168*142*10
QPD8-200-2300-30-S	0.2~2.3	30/2	3	18	0.3/4	1.3	SMA	218*118*12

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD8-200-6000-30-S	0.2~6	30/2	6.8	17	0.5/5	1.35	SMA	260*120*12
QPD8-223-235-30-S	0.223~0.235	30/2	1.2	20	0.4/4	1.3	SMA	138*130*12
QPD8-240-30-S	0.24	30/2	0.6	20	0.2/2	1.2	SMA	202*106*14
QPD8-300-500-30-S	0.3~0.5	30/2	0.8	20	0.2/3	1.25	SMA	210*98*12
QPD8-300-3000-NS	0.3~3	30/2	2.6	20	0.3/4	1.3	SMA&N	163*120*20
QPD8-300-6000-30-S	0.3~6	30/2	4.8	20	0.3/6	1.4	SMA	176*120*12
QPD8-300-18000-30-S	0.3~18	30/5	8.3	18	0.5/6	1.5	SMA	270*117.9*12.7
QPD8-400-900-30-B	0.4~0.9	30/2	0.6	20	0.3/3	1.25	BNC	194*124*20
QPD8-400-4000-30-N	0.4~4	30/2	2.4	20	0.4/4	1.35	N	200*100*20
QPD8-400-6000-30-S	0.4~6	30/2	3.2	20	0.4/5	1.35	SMA	138*120*12
QPD8-400-6000-80-S	0.4~6	80/5	6	18	0.3/6	1.6	SMA	324*185*14
QPD8-450-6000-30-S	0.45~6	30/2	3.2	18	0.3/4	1.35	SMA	120*120*12
QPD8-470-510-10-S	0.47~0.51	10/-	2	20	0.5/5	1.3	SMA	190*60*11
QPD8-470-510-20-S	0.47~0.51	20/-	1.5	20	0.5/5	1.3	SMA	192*81*12
QPD8-500-2000-30-S	0.5~2	30/2	1.5	20	0.4/4	1.3	SMA	123*120*12
QPD8-500-3000-30-S	0.5~3	30/2	1.8	20	0.3/4	1.25	SMA	126*110*12
QPD8-500-3000-30-N	0.5~3	30/2	1.8	20	0.3/4	1.3	N	200*95*20
QPD8-500-4000-30-NS	0.5~4	30/2	2	20	0.3/4	1.3	SMA&N	120*110*20
QPD8-500-4000-30-S	0.5~4	30/2	2.3	20	0.2/4	1.3	SMA	126*110*12
QPD8-500-6000-30-S	0.5~6	30/2	3	18	0.4/4	1.4	SMA	115*113*12
QPD8-500-6000-30-N	0.5~6	30/2	3	18	0.4/5	1.4	N	200*120*20
QPD8-500-8000-20-S	0.5~8	20/1	3	18	0.4/5	1.5	SMA	114*114.5*10
QPD8-500-8000-20-N	0.5~8	20/1	4	18	0.4/5	1.5	N	190*128*20
QPD8-500-18000-20-S	0.5~18	20/1	6	14	0.8/10	2	SMA	172*160*10
QPD8-500-26500-30-S	0.5~26.5	30/2	8	18	0.5/10	1.6	SMA	161.9*117.9*12.7
QPD8-500-40000-20-K	0.5~40	20/2	11	15	0.8/12	1.8	2.92mm	161.9*147.3*12.7
QPD8-600-2000-30-S	0.6~2	30/2	1	20	0.3/4	1.25	SMA	112*70*12
QPD8-600-6000-30-S	0.6~6	30/2	2.8	18	0.4/5	1.3	SMA	115*113*12
QPD8-600-6000-30-N	0.6~6	30/2	2.5	18	0.3/5	1.4	N	200*96*20
QPD8-600-8000-30-S	0.6~8	30/2	3.6	20	0.4/5	1.4	SMA	130*118*10
QPD8-700-3000-30-S	0.7~3	30/2	1	20	0.3/4	1.3	SMA	116*86*14
QPD8-700-3000-30-N	0.7~3	30/2	1.2	20	0.4/4	1.3	N	196*88*20
QPD8-700-4000-30-N	0.7~4	30/2	1.8	20	0.4/4	1.3	N	200*100*20
QPD8-750-1710-30-S	0.75~1.71	30/2	0.6	20	0.3/3	1.2	SMA	112*70*12
QPD8-800-2000-30-S	0.8~2	30/2	1	20	0.3/4	1.25	SMA	101.6*68.58*10.16
QPD8-800-2500-30-N	0.8~2.5	30/2	1.4	20	0.4/4	1.25	N	196*88*20
QPD8-800-2700-30-N	0.8~2.7	30/2	1.5	20	0.4/4	1.3	N	196*88*20
QPD8-800-4200-30-S	0.8~4.2	30/2	1.8	20	0.4/4	1.4	SMA	120*90*12
QPD8-800-4200-K2-NS	0.8~4.2	200/-	1.2	6	0.25/7	1.3	SMA&N	155.69*144.78*25.91
QPD8-800-5000-20-S	0.8~5	20/1	1.5	20	0.4/3	1.4	SMA	150*148*12
QPD8-800-6000-20-S	0.8~6	20/2	2	20	0.4/5	1.35	SMA	118*108*10
QPD8-800-8000-30-S	0.8~8	30/2	3.6	20	0.4/5	1.4	SMA	118*115*10
QPD8-950-2150-30-S	0.95~2.15	30/2	3	30	0.3/3	1.25	SMA	110*93*12
QPD8-950-2150-30-N	0.95~2.15	30/2	1.2	22	0.4/4	1.25	N	196*88*20
QPD8-950-2150-30-T	0.95~2.15	30/2	0.8	20	0.3/3	1.25	TNC	192*62*20
QPD8-950-2150-30-NS	0.95~2.15	30/2	3	30	0.3/3	1.25	N&SMA	224*80*21
QPD8-950-2150-30-S-DC	0.95~2.15	30/1	0.6	20	0.3/3	1.25	SMA	120*114*14
QPD8-1000-1700-30-S	1~1.7	30/2	0.8	22	0.4/4	1.25	SMA	112*70*12
QPD8-1000-3000-30-S	1~3	30/2	1	18	0.3/4	1.3	SMA	112*70*12
QPD8-1000-6000-30-S	1~6	30/2	2	23	0.2/4	1.25	SMA	110*82*12
QPD8-1000-18000-20-S	1~18	20/1	4	15	0.5/10	1.8	SMA	156*110*10
QPD8-1000-26500-30-S	1~26.5	30/2	5.4	18	0.5/7	1.6	SMA	120*110*12.7
QPD8-1000-40000-20-K	1~40	20/2	7.3	18	0.7/11	1.7	2.92mm	120*110*12.7
QPD8-1000-50000-20-2	1~50	20/2	9.2	18	0.9/14	1.8	2.4mm	120*110*12.7
QPD8-1100-1700-30-T	1.1~1.7	30/2	0.8	22	0.3/3	1.25	TNC	192*62*20
QPD8-1370-30-S	1.37	30/2	0.8	20	0.2/3	1.2	SMA	112*70*12
QPD8-1500-1700-20-S	1.5~1.7	20/1	0.3	20	0.2/4	1.25	SMA	138*125*14
QPD8-1500-5000-30-S	1.5~5	30/2	1.2	20	0.2/2	1.3	SMA	108*63*10
QPD8-1525-1850-K1-N	1.525~1.85	100/10	0.8	18	0.3/4	1.2	N	212*125*22
QPD8-1850-2700-K25-N	1.85~2.7	250/15	0.8	18	0.4/4	1.3	N	212*145*22
QPD8-2000-6000-30-S	2~6	30/2	1	18	0.3/4	1.3	SMA	108*63*10

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD8-2000-6000-30-N	2~6	30/2	1.2	20	0.4/4	1.3	N	200*60*20
QPD8-2000-8000-30-S	2~8	30/2	1.5	18	0.4/5	1.35	SMA	108*63*10
QPD8-2000-10000-30-S	2~10	30/2	2	18	0.4/4	1.4	SMA	110*80*10
QPD8-2000-18000-20-S	2~18	20/1	3.2	16	0.5/10	1.6	SMA	148.5*95*10
QPD8-2000-26500-20-S	2~26.5	20/1	3.2	16	0.8/10	1.9	SMA	123.5*88*10
QPD8-2000-26500-20-K	2~26.5	20/1	3.2	16	0.8/10	1.9	2.92mm	123.5*88*10
QPD8-2000-40000-20-K	2~40	20/2	5.9	18	0.7/10	1.7	2.92mm	117.9*88.9*12.7
QPD8-2000-50000-20-2	2~50	20/1	7.2	18	0.8/12	1.8	2.4mm	117.9*88.9*12.7
QPD8-2400-6000-30-S	2.4~6	30/2	1.5	20	0.4/4	1.35	SMA	108*63*10
QPD8-2700-3100-K2-S	2.7~3.1	200/-	0.9	18	0.3/5	1.5	SMA	110*40*14
QPD8-3000-13000-20-S	3~13	20/1	2	18	0.4/6	1.4	SMA	188*98*10
QPD8-4000-6000-30-S	4~6	30/2	1.2	18	0.4/4	1.4	SMA	108*63*10
QPD8-4000-8000-30-S	4~8	30/2	0.8	18	0.3/5	1.35	SMA	112*56*12
QPD8-4000-12000-20-S	4~12	20/1	1.5	18	0.2/4	1.5	SMA	110*82*10
QPD8-4000-18000-30-S	4~18	30/1	1.8	16	0.5/6	1.8	SMA	108*63*10
QPD8-4900-5900-30-S	4.9~5.9	30/2	0.8	20	0.3/3	1.3	SMA	108*63*10
QPD8-5000-12000-20-S	5~12	20/1	1.2	18	0.5/5	1.4	SMA	104*55*10
QPD8-6000-12000-20-SM	6~12	20/1	1.5	18	0.4/5	1.5	SMA	106*60*10
QPD8-6000-18000-50-S	6~18	50/-	2.4	17	0.5/8	1.8	SMA	191*63*10
QPD8-6000-18000-K1-S	6~18	100/-	2.4	15	0.5/8	1.8	SMA	191*70*10
QPD8-6000-26500-30-S	6~26.5	30/2	2.9	18	0.5/6	1.6	SMA	104*49*12.7
QPD8-6000-40000-20-K	6~40	20/1	3.2	15	0.5/8	2.2	2.92mm	104*40*10
QPD8-8000-9000-K1-S	8~9	100/-	1.5	18	0.5/5	1.35	SMA	191*70*10
QPD8-8000-12000-20-S	8~12	20/1	1.4	18	0.4/5	1.4	SMA	122.5*57.5*10
QPD8-9000-11000-20-S	9~11	20/1	1.2	18	0.4/5	1.4	SMA	122.5*57.5*10
QPD8-9000-45000-R1-2	9~45	0.1/-	7	15	1/20	1.4	2.4mm	120*40*12.7
QPD8-17000-31000-20-K	17~31	20/1	2	16	0.5/6	1.6	2.92mm	104*40*10
QPD8-18000-26500-20-K	18~26.5	20/1	1.8	16	0.5/6	1.6	2.92mm	104*40*10
QPD8-18000-40000-20-K	18~40	20/1	3.2	16	0.5/8	1.7	2.92mm	104*40*10
QPD8-18000-40000-30-K	18~40	30/1	3.6	15	0.6/6	1.7	2.92mm	104*40*10
QPD8-18000-50000-20-2	18~50	20/1	4.2	18	0.8/10	1.8	2.4mm	103.7*30*12.7
QPD8-24000-44000-20-2	24~44	20/1	3.6	18	0.6/8	1.7	2.4mm	103.7*30*12.7
QPD8-26500-40000-20-K	26.5~40	20/2	3	18	0.5/8	1.6	2.92mm	103.7*30*12.7
QPD8-26500-50000-20-2	26.5~50	20/1	4.2	18	0.8/10	1.8	2.4mm	103.7*30*12.7
QPD8-27000-32000-20-K	27~32	20/1	1.8	18	0.5/8	1.5	2.92mm	104*40*10
QPD8-35350-36150-20-K	35.35~36.15	20/1	1.8	18	0.5/8	1.5	2.92mm	104*40*10
QPD8-40000-67000-12-V	40~67	12/1	5.9	16	1/12	1.9	1.85mm	103.7*30*12.7
QPD8-50000-66000-R1	50~66	0.1/-	6	15	1/20	1.4	WR-15	180*50*20

10-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	Connector	Size* (mm)
QPD10-470-500-2-S	0.47~0.5	2/-	0.6	20	0.3/4	1.2	SMA	140*60*12.7
QPD10-500-6000-30-S	0.5~6	30/2	5.8	18	1.5/12	1.5	SMA	200*150*12
QPD10-600-6000-30-S	0.6~6	30/2	3.5	18	0.8/12	1.5	SMA	150*148*12
QPD10-2000-30-S	2	30/2	0.8	20	0.2/2	1.3	SMA	130*150*12
QPD10-2000-18000-30-S	2~18	30/5	2.8	18	0.8/9	1.6	SMA	157*129.3*12.7
QPD10-6000-18000-30-S	6~18	30/5	2.5	16	0.8/8	1.7	SMA	193*77*12.7
QPD10-6000-26500-30-S	6~26.5	30/2	3.4	15	0.9/10	1.7	SMA	193*77*12.7
QPD10-6000-40000-20-K	6~40	20/2	4.9	15	1.2/14	1.8	2.92mm	193*77*12.7
QPD10-18000-26500-30-S	18~26.5	30/2	3.4	16	0.9/10	1.7	SMA	193*77*12.7
QPD10-18000-40000-20-K	18~40	20/2	4.9	16	1.2/14	1.8	2.92mm	193*77*12.7

11-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	Connector	Size* (mm)
QPD11-0-1000-2-N	DC~1	2/-	20.0±1.5	20	0.5/-	1.3	N	78.4*78.4*18

12-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	Connector	Size* (mm)
QPD12-0-4000-2-N	DC~4	2/-	23.6	20	2/-	1.5	N	90.59*90.59*20
QPD12-0-5000-2-S	DC~5	2/-	24.5	20	0.9/9	1.3	SMA	178*70*12.5
QPD12-240-30-S	0.24	30/2	0.8	20	0.5/4	1.3	SMA	280*152*14
QPD12-300-18000-30-S	0.3~18	30/5	10	18	0.8/12	1.6	SMA	312.4*156*12.7
QPD12-500-8000-20-S	0.5~8	20/1	5	16	1.2/12	1.6	SMA	286*180*12
QPD12-500-18000-30-S	0.5~18	30/5	6.5	18	0.7/12	1.6	SMA	275*165.7*12.7
QPD12-600-6000-30-S	0.6~6	30/2	5	18	1/12	1.5	SMA	180*178*12
QPD12-700-6000-30-S	0.7~6	30/-	4.3	16	1/20	1.6	SMA	272*106*10
QPD12-900-1300-K1-N	0.9~1.3	100/100	1.5	20	0.4/8	1.5	N	300*120*20
QPD12-1000-2000-30-N	1~2	30/2	1.5	20	0.5/6	1.4	N	300*100*20
QPD12-2000-6000-30-S	2~6	30/2	2.2	18	0.8/10	1.5	SMA	156*92*10
QPD12-2000-8000-30-S	2~8	30/2	1.6	18	0.6/6	1.45	SMA	156*92*10
QPD12-2000-12000-20-S	2~12	20/1	3	17	0.8/8	1.5	SMA	168*102*10
QPD12-2000-18000-20-S	2~18	20/1	4.2	15	0.8/12	2	SMA	230*120*10
QPD12-4900-5200-30-S	4.9~5.2	30/2	1	20	0.6/3	1.4	SMA	156*92*10
QPD12-5000-6000-20-S	5~6	20/1	1.6	20	0.25/5	1.22	SMA	156*92*10
QPD12-5800-20-S	5.8	20/1	1.6	20	0.5/6	1.4	SMA	156*92*10
QPD12-6000-18000-20-S	6~18	20/1	2	16	0.6/8	1.8	SMA	154*76*10
QPD12-6000-26500-30-S	6~26.5	30/2	3.4	18	0.8/12	1.6	SMA	180.5*56*12.7
QPD12-6000-40000-20-K	6~40	20/2	6	18	1/15	1.7	SMA	180.5*56*12.7
QPD12-8000-12000-20-S	8~12	20/1	1.5	16	0.6/8	1.7	SMA	154*76*10
QPD12-18000-40000-20-K	18~40	20/2	6	18	1/15	1.7	2.92mm	180.5*56*12.7

14-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD14C-500-1600	0.5~1.6	-/-	18.5	18	1.5/3	1.5	SMA	110*191*10

16-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD16-0-3000-2-S	DC~3	2/-	24±2.5	24	1.5/-	1.4	SMA	81.3*80.9*16
QPD16-5-300-1-S	0.005~0.3	1/-	2.7	18	0.9/15	1.5	SMA	50*209*10
QPD16-5-1000-2-S	0.005~1	2/-	24±2.0	24	1.2/-	1.3	SMA	81.3*80.9*16
QPD16-50-1000-1-S	0.05~1	1/-	3.7	18	0.9/15	1.5	SMA	50*209*10
QPD16-50-5000-2-S	0.05~5	2/-	28	22	0.8/8	1.5	SMA	236*80*12
QPD16-98-102-30-N	0.098~0.102	30/2	1.2	20	0.3/3	1.2	N	420*196*20
QPD16-200-2000-30-NS	0.2~2	30/2	3.5	20	0.2/2	1.5	SMA&N	370*160*20
QPD16-260-460-20-S	0.26~0.46	20/2	1.5	20	0.3/4	1.25	SMA	300*138*14
QPD16-380-6000-30-S	0.38~6	30/2	6	18	0.5/8	1.5	SMA	232*180*12
QPD16-380-6000-30-N	0.38~6	30/2	6.8	18	0.5/8	1.5	N	388*180*20
QPD16-400-6000-30-S	0.4~6	30/2	5	18	0.5/8	1.5	SMA	232*160*12
QPD16-500-3000-50-S	0.5~3	50/2	3	18	1/15	1.6	SMA	217*125*12
QPD16-500-3000-50-N	0.5~3	50/2	3	18	1/15	1.6	N	386*125*18
QPD16-500-6000-30-S	0.5~6	30/2	4.8	20	0.5/8	1.5	SMA	236*150*12
QPD16-500-6000-30-N	0.5~6	30/2	4.8	18	0.5/8	1.5	N	388*150*20
QPD16-500-18000-30-S	0.5~18	30/5	8.3	18	0.6/10	1.6	SMA	240.9*210*12.7
QPD16-600-2000-30-S	0.6~2	30/2	1.4	20	0.2/2	1.3	SMA	102*218*12
QPD16-600-3000-30-NS	0.6~3	30/2	2.2	20	0.4/6	1.4	SMA&N	218*113*20
QPD16-600-6000-30-S	0.6~6	30/2	4.5	18	0.4/6	1.5	SMA	140*232*12
QPD16-700-3000-30-S	0.7~3	30/2	1.4	20	0.3/5	1.4	SMA	212*104*12
QPD16-700-3000-30-N	0.7~3	30/2	1.8	20	0.4/6	1.4	N	388*110*20
QPD16-700-4000-30-S	0.7~4	30/2	2.4	18	0.4/8	1.4	SMA	232*110*12
QPD16-700-4000-30-T	0.7~4	30/2	2.2	20	0.4/6	1.4	TNC	388*110*20
QPD16-700-6000-30-N	0.7~6	30/2	3.8	18	0.5/8	1.5	N	388*140*20
QPD16-700-6000-30-T	0.7~6	30/2	3.5	20	0.5/8	1.5	TNC	388*150*20
QPD16-800-5000-50-N	0.8~5	50/5	3.5	18	0.4/6	1.4	N	480*160*22
QPD16-950-2150-30-S	0.95~2.15	30/2	1.2	25	0.3/4	1.3	SMA	90*214*12
QPD16-1000-2000-30-S	1~2	30/2	1.2	25	0.3/4	1.3	SMA	90*214*12
QPD16-1000-4000-30-SN	1~4	30/2	1.6	20	0.4/5	1.4	SMA&N	100*224*20
QPD16-1000-6000-30-S	1~6	30/2	2.5	20	0.5/6	1.45	SMA	100*236*12
QPD16-1000-18000-20-S	1~18	20/1	6.5	15	1.8/12	2	SMA	126*315.5*10
QPD16-1100-1600-N	1.1~1.6	-/-	-	20	0.4/6	1.8	N	110*388*20
QPD16-1500-5000-30-S	1.5~5	30/2	2	18	0.2/2	1.3	SMA	218*80*12
QPD16-2000-3000-30-S	2~3	30/2	1.2	20	0.2/2	1.3	SMA	212*67*10
QPD16-2000-4000-30-S	2~4	30/2	0.6	18	0.3/5	1.35	SMA	215*130*10
QPD16-2000-4000-50-S	2~4	50/2.5	0.6	16	3/5	1.35	SMA	241*164*10
QPD16-2000-6000-30-S	2~6	30/2	2	18	0.2/2	1.3	SMA	218*80*12
QPD16-2000-18000-20-S	2~18	20/1	5	15	0.7/10	2	SMA	120*215*10
QPD16-2490-2690-30-S	2.49~2.69	30/2	1	20	0.3/4	1.25	SMA	70*212*12
QPD16-2610-3000-30-S	2.61~3	30/2	1	20	0.3/4	1.3	SMA	67*212*12.5
QPD16-2700-3500-2K-N	2.7~3.5	2K/2K	0.35	-	0.3/5	1.5	WR284&N	-
QPD16-3000-8000-30-S	3~8	30/2	2	18	0.4/6	1.45	SMA	218*100*12
QPD16-5000-12000-20-S	5~12	20/1	4	16	0.7/10	1.8	SMA	82*215*10
QPD16-5000-18000-20-S	5~18	20/1	5	15	0.7/10	2	SMA	120*215*10
QPD16-6000-18000-20-S	6~18	20/1	1.8	17	0.8/8	1.5	SMA	224*50*10
QPD16-6000-26500-30-S	6~26.5	30/2	4.4	18	0.7/8	1.7	SMA	210*44.5*12.7
QPD16-6000-40000-20-K	6~40	20/2	5.5	15	0.8/12	1.7	2.92mm	210*44.5*12.7
QPD16-8000-12000-20-S	8~12	20/1	1.8	18	0.5/6	1.5	SMA	212*85*10

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD16-18000-26500-30-S	18~26.5	30/2	3.8	16	0.5/6	1.6	SMA	210*36*12.7
QPD16-18000-40000-20-K	18~40	20/2	4.7	18	0.7/12	1.8	2.92mm	210*36*12.7
QPD16-18000-50000-20-2	18~50	20/1	6	16	1/14	1.8	2.4mm	210*36*12.7
QPD16-24000-44000-20-2	24~44	20/1	5.4	16	0.8/10	1.8	2.4mm	210*36*12.7
QPD16-40000-67000-12-V	40~67	12/1	8.3	15	1.4/16	2	1.85mm	210*36*12.7

18-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD18-700-4000-30-S	0.7~4	30/2	3	18	1/12	1.5	SMA	264*263*14
QPD18-900-1300-30-S	0.9~1.3	30/2	1	18	0.5/3	1.5	SMA	210*263*14
QPD18-1000-2000-30-S	1~2	30/2	2.4	18	0.1/12	1.5	SMA	185*263*14

20-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD20-4000-8000-K3-NS	4~8	300/300	2	18	0.8/10	1.8	SMA&N	106*261*22

24-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD24-20-480-1-S	0.02~0.48	1/0.15	2.4	16	1/12	1.6	SMA	348*115*14
QPD24-315-433-30-S	0.315~0.433	30/2	1.2	20	0.8/8	1.4	SMA	498*164*14
QPD24-500-3000-20-S	0.5~3	20/1	2.8	18	0.8/8	1.5	SMA	344*200*12
QPD24-1300-1600-20-S	1.3~1.6	20/2	1.4	20	0.5/6	1.35	SMA	348*115*14

32-Way Power Dividers/Combiners

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Power as Divider/ Combiner (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude/ Phase Balance (±dB/°, max.)	VSWR (max.)	Connector	Size* (mm)
QPD32-400-490-30-S	0.4~0.49	30/2	1.6	22	0.3/3	1.25	SMA	482*185*15
QPD32-700-2700-30-S	0.7~2.7	30/2	1.8	18	0.5/8	1.5	SMA	430*110*14
QPD32-700-3000-30-S	0.7~3	30/2	2.2	18	0.4/6	1.4	SMA	426*105*12
QPD32-700-4000-50-N	0.7~4	50/3	2.8	18	0.5/8	1.5	N	580*444*20
QPD32-1000-2000-30-S	1~2	30/2	1.4	18	0.5/5	1.4	SMA	456*90*14
QPD32-1000-4000-K1-N	1~4	100/5	2.2	18	0.5/8	1.5	N	580*444*20
QPD32-2000-18000-30-S	2~18	30/5	5.7	16	0.8/9	1.7	SMA	419.6*95*14
QPD32-6000-18000-20-S	6~18	20/1	3.5	16	0.6/8	1.8	SMA	105*420*10
QPD32-18000-40000-20-K	18~40	20/2	6.8	16	1/13	1.8	2.92mm	210*110*14

Probes

Qualwave provides DC~67GHz high frequency probes, which have the characteristics of long service life, low VSWR and low insertion loss, and are suitable for microwave test and other areas.

Probes

RF coaxial probe is a kind of measuring component, which is used for electronic testing equipment to measure the RF signal of electronic circuit in silicon chip, tube core and open microchip.

Features: Durable, Low Insertion Loss, Low VSWR; **Applications:** Microwave Test.

How To Order:

QP-F-V-W-X-Y-Z

- F: Stop Frequency (GHz)
- V: Mounting Style
- W: Pitch (μm)
- X: Material: Beryllium copper (C)
- Y: Mounting Style: 45° (45)
- Z: Tip Size (μm)

Examples: To order a probe, DC~40GHz, GSG, pitch 100μm, tip size 50μm, 45°, beryllium copper, specify QP-40-GSG-100-50-45-C.

Part Number	Frequency (GHz)	Pitch (μm)	Tip Size (μm)	IL (dB, max.)	VSWR (max.)	Configuration	Mounting Style	Connector	Material	Power (W, max.)
QP-67-GSG-100-25-45-C	DC~67	100	25	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-100-50-45-C	DC~67	100	50	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-150-25-45-C	DC~67	150	25	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-150-50-45-C	DC~67	150	50	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-200-25-45-C	DC~67	200	25	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-200-50-45-C	DC~67	200	50	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-250-25-45-C	DC~67	250	25	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-67-GSG-250-50-45-C	DC~67	250	50	1.4	1.5	GSG	45°	1.85mm	Beryllium Copper	4
QP-50-GSG-100-25-45-C	DC~50	100	25	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-100-50-45-C	DC~50	100	50	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-150-25-45-C	DC~50	150	25	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-150-50-45-C	DC~50	150	50	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-200-25-45-C	DC~50	200	25	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-200-50-45-C	DC~50	200	50	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-250-25-45-C	DC~50	250	25	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-50-GSG-250-50-45-C	DC~50	250	50	1.2	1.5	GSG	45°	2.4mm	Beryllium Copper	5
QP-40-GSG-100-25-45-C	DC~40	100	25	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-100-50-45-C	DC~40	100	50	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-150-25-45-C	DC~40	150	25	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-150-50-45-C	DC~40	150	50	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-200-25-45-C	DC~40	200	25	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-200-50-45-C	DC~40	200	50	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-250-25-45-C	DC~40	250	25	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6
QP-40-GSG-250-50-45-C	DC~40	250	50	0.8	1.45	GSG	45°	2.92mm	Beryllium Copper	6

Rotary Joints

Qualwave provides DC~50GHz high frequency rotary joints, which can support single channel or multi-channel high frequency transmission.

Rotary Joints

Rotary joint can also be called RF slip ring. It is used to transmit RF signal between rotor and stator in rotating system. Rotary joints can be divided into coaxial rotary joints, waveguide rotary joints and waveguide coaxial rotary joints.

Features: Low VSWR, Low VSWR Flatness, Low Insertion Loss Flatness; **Applications:** High Speed Digital Signal Transmission, Analog Signal Transmission.

How To Order:

QRJV-W-X-Y-Z

- Number of RF Channels
- Stop Frequency (MHz)
- Outer Diameter (mm)
- Signal Circuits (2A) (eg: 6 circuits signal@2A, code "06S"; 12 circuits signal@2A, code "12S")
- Power Circuits (10A) (eg: 6 circuits@10A, code "0610"; 12 circuits@10A, code "1210")

Examples: To order a rotary joint, single channel, DC~18GHz, outer diameter 86mm, specify QRJ1-18000-86.

Part Number	Channels	Frequency (GHz)	Outer Diameter (mm)	Power Circuits 10A	Signal Circuits 2A	Connectors
QRJ1-3000-07	1	DC~3	7	0	0	RG405 (SMA, MCX, MMCX)
QRJ1-3000-22-06S	1	DC~3	22	0	6	RG405 (SMA, MCX, MMCX)
QRJ1-3000-22-12S	1	DC~3	22	0	12	RG405 (SMA, MCX, MMCX)
QRJ1-3000-32-18S	1	DC~3	32.8	0	18	RG405 (SMA, MCX, MMCX)
QRJ1-3000-32-24S	1	DC~3	32.8	0	24	RG405 (SMA, MCX, MMCX)
QWRJ1-14500-46	1	13.75~14.5	46	0	0	-
QRJ1-18000-12	1	DC~18	12.7	0	0	SMA (f)
QRJ1-18000-32-12S	1	DC~18	32.8	0	12	SMA (f)
QRJ1-18000-32-24S	1	DC~18	32.8	0	24	SMA (f)
QRJ1-18000-56-0610	1	DC~18	56	6	0	SMA (f)
QRJ1-18000-56-06S	1	DC~18	56	0	6	SMA (f)
QRJ1-18000-56-0610-06S	1	DC~18	56	6	6	SMA (f)
QRJ1-18000-56-1210	1	DC~18	56	12	0	SMA (f)
QRJ1-18000-56-12S	1	DC~18	56	0	12	SMA (f)
QRJ1-18000-56-0610-12S	1	DC~18	56	6	12	SMA (f)
QRJ1-18000-56-1810	1	DC~18	56	18	0	SMA (f)
QRJ1-18000-56-18S	1	DC~18	56	0	18	SMA (f)
QRJ1-18000-56-0610-18S	1	DC~18	56	6	18	SMA (f)
QRJ1-18000-56-1210-12S	1	DC~18	56	12	12	SMA (f)
QRJ1-18000-56-2410	1	DC~18	56	24	0	SMA (f)
QRJ1-18000-56-24S	1	DC~18	56	0	24	SMA (f)
QRJ1-18000-56-36S	1	DC~18	56	0	36	SMA (f)
QRJ1-18000-56-48S	1	DC~18	56	0	48	SMA (f)
QRJ1-18000-86-0610	1	DC~18	86	6	0	SMA (f)
QRJ1-18000-86-06S	1	DC~18	86	0	6	SMA (f)
QRJ1-18000-86-0610-06S	1	DC~18	86	6	6	SMA (f)
QRJ1-18000-86-1210	1	DC~18	86	12	0	SMA (f)
QRJ1-18000-86-12S	1	DC~18	86	0	12	SMA (f)
QRJ1-18000-86-0610-12S	1	DC~18	86	6	12	SMA (f)
QRJ1-18000-86-1810	1	DC~18	86	18	0	SMA (f)
QRJ1-18000-86-18S	1	DC~18	86	0	18	SMA (f)
QRJ1-18000-86-0610-18S	1	DC~18	86	6	18	SMA (f)
QRJ1-18000-86-1210-12S	1	DC~18	86	12	12	SMA (f)
QRJ1-18000-86-2410	1	DC~18	86	24	0	SMA (f)
QRJ1-18000-86-24S	1	DC~18	86	0	24	SMA (f)
QRJ1-18000-86-0610-30S	1	DC~18	86	6	30	SMA (f)
QRJ1-18000-86-1210-24S	1	DC~18	86	12	24	SMA (f)
QRJ1-18000-86-3610	1	DC~18	86	36	0	SMA (f)
QRJ1-18000-86-36S	1	DC~18	86	0	36	SMA (f)
QRJ1-18000-86-0610-42S	1	DC~18	86	6	42	SMA (f)
QRJ1-18000-86-1210-36S	1	DC~18	86	12	36	SMA (f)
QRJ1-18000-86-2410-24S	1	DC~18	86	24	24	SMA (f)
QRJ1-18000-86-4810	1	DC~18	86	48	0	SMA (f)
QRJ1-18000-86-48S	1	DC~18	86	0	48	SMA (f)
QRJ1-18000-86-2410-36S	1	DC~18	86	24	36	SMA (f)

Part Number	Channels	Frequency (GHz)	Outer Diameter (mm)	Power Circuits 10A	Signal Circuits 2A	Connectors
QRJ1-18000-86-6010	1	DC~18	86	60	0	SMA (f)
QRJ1-18000-86-60S	1	DC~18	86	0	60	SMA (f)
QRJ1-18000-86-2410-48S	1	DC~18	86	24	48	SMA (f)
QRJ1-18000-86-7210	1	DC~18	86	72	0	SMA (f)
QRJ1-18000-86-72S	1	DC~18	86	0	72	SMA (f)
QRJ1-18000-86-96S	1	DC~18	86	0	96	SMA (f)
QRJ1-18000-86-120S	1	DC~18	86	0	120	SMA (f)
QRJ1-40000-12	1	DC~40	12.5	0	0	2.92mm (f)
QRJ1-50000-12	1	DC~50	12.7	0	0	2.4mm (f)
QRJ1-50000-56-0610	1	DC~50	56	6	0	2.4mm (f)
QRJ1-50000-56-06S	1	DC~50	56	0	6	2.4mm (f)
QRJ1-50000-56-0610-06S	1	DC~50	56	6	6	2.4mm (f)
QRJ1-50000-56-1210	1	DC~50	56	12	0	2.4mm (f)
QRJ1-50000-56-12S	1	DC~50	56	0	12	2.4mm (f)
QRJ1-50000-56-0610-12S	1	DC~50	56	6	12	2.4mm (f)
QRJ1-50000-56-1810	1	DC~50	56	18	0	2.4mm (f)
QRJ1-50000-56-18S	1	DC~50	56	0	18	2.4mm (f)
QRJ1-50000-56-0610-18S	1	DC~50	56	6	18	2.4mm (f)
QRJ1-50000-56-1210-12S	1	DC~50	56	12	12	2.4mm (f)
QRJ1-50000-56-2410	1	DC~50	56	24	0	2.4mm (f)
QRJ1-50000-56-24S	1	DC~50	56	0	24	2.4mm (f)
QRJ1-50000-56-36S	1	DC~50	56	0	36	2.4mm (f)
QRJ1-50000-56-48S	1	DC~50	56	0	48	2.4mm (f)
QRJ2-18000-31	2	1 Channel: DC~18GHz 2 Channel: DC~5GHz	31.7	0	0	SMA (f)
QRJ2-18000-64-0610	2	1 Channel: DC~18GHz 2 Channel: DC~4.5GHz	64	6	0	SMA (f)
QRJ2-18000-64-06S	2	1 Channel: DC~18GHz 2 Channel: DC~4.5GHz	64	0	6	SMA (f)
QRJ2-18000-64-12S	2	1 Channel: DC~18GHz 2 Channel: DC~4.5GHz	64	0	12	SMA (f)
QRJ2-18000-64-18S	2	1 Channel: DC~18GHz 2 Channel: DC~4.5GHz	64	0	18	SMA (f)
QRJ2-18000-64-24S	2	1 Channel: DC~18GHz 2 Channel: DC~4.5GHz	64	0	24	SMA (f)

RF Surge Protectors

RF surge protectors can protect the system from damage caused by high electromagnetic pulses (EMP) or extremely high surges (usually caused by lightning strikes), and are commonly used in antenna devices to protect sensitive equipment, allowing the desired frequency to pass through and blocking lightning surges.

Qualwaves Inc. supplies RF surge protectors work from DC~6GHz.

Features: Broadband; **Applications:** Any Applications

RF Surge Protectors

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Power (W)	Working Voltage (DC)	Lightning Surge Current (kA)	Connector	Size* (mm)
QSP44-MF-03	DC~3	1.2	-	400	90V/150V/230V/350V/600V	10	4.3-10 (m) to 4.3-10 (f)	Φ24.5*62.3
QSP44-FF-03	DC~3	1.2	-	400	90V/150V/230V/350V/600V	10	4.3-10 (f) to 4.3-10 (f)	Φ24.5*57.4
QSP77-MF-03	DC~3	1.2	-	2500	-	10	7/16 DIN (m) to 7/16 DIN (f)	65.5*52
QSPBB-MF-03	DC~3	1.2	-	200	90V/150V/230V/350V/600V	20	BNC (m) to BNC (f)	L: 50.4
QSPFF-MF-03-MT	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	F (m) to F (f) Metric Thread	L: 52.4
QSPFF-FF-03-IT	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	F (f) to F (f) Inch Thread	L: 46.7
QSPFF-MF-03-IT	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	F (m) to F (f) Inch Thread	L: 52.8
QSPNN-MF-03-1	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	N (m) to N (f)	Φ25.2*70.5
QSPNN-MF-03-2	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	N (m) to N (f)	21.9*69.7
QSPNN-FF-03	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	N (f) to N (f)	Φ25.2*64.2
QSPNN-MF-06	DC~6	1.2	0.25	200	90V/150V/230V/350V/600V	20	N (m) to N (f)	Φ21.65*61.1
QSPSS-MF-03	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	SMA (m) to SMA (f)	L: 47
QSPSS-FF-03	DC~3	1.2	0.25	200	90V/150V/230V/350V/600V	20	SMA (f) to SMA (f)	L: 48.4
QSPSS-MF-06	DC~6	1.2	0.25	200	90V/150V/230V/350V/600V	20	SMA (m) to SMA (f)	L: 47.3
QSPTT-MF-03	DC~3	1.25	0.45	200	90V/150V/230V/350V/600V	20	TNC (m) to TNC (f)	L: 50.2
QSPTT-MF-06	DC~6	1.25	0.45	200	90V/150V/230V/350V/600V	20	TNC (m) to TNC (f)	Φ23*69

Quarter Wave Surge Protectors

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Power (W)	Working Voltage (DC)	Lightning Surge Current (kA)	Connector	Size* (mm)
QWSP77-MF-02	0.8~2.5	1.2	0.3	2500	-	30	7/16 DIN (m) to 7/16 DIN (f)	63*64
QWSP77-FF-02	0.8~2.7	1.2	0.3	2500	-	30	7/16 DIN (f) to 7/16 DIN (f)	63*64
QWSPNN-MF-02	0.8~2.5	1.25	0.2	2500	-	30	N (m) to N (f)	62.6*81.2
QWSPNN-FF-02	0.8~2.5	1.25	0.2	2500	-	30	N (f) to N (f)	62.7*74
QWSPNN-MF-06	2.2~6	1.25	0.2	2500	-	30	N (m) to N (f)	42.2*64.7

Switches

The switch is used for connecting and disconnecting RF signals. Qualwave supplies a series of swtiches, including RF coaxial switches (electromechanical switches), PIN diode switches, waveguide switches, waveguide coaxial switches and surface mount switches. The frequency range is up to 110GHz.

RF Coaxial Switches

RF coaxial switch, also called electromechanical switch, refers to the connecting and disconnecting of signals through relays. There are three types of actuator:

Failsafe, it indicates that the common port will automatically switch to the default connection port after the switch is powered off.

Normally open, it means that the common port of the switch will not be connected to any port when the power is off, and the switch is in the off state.

Latching, it means that the switch state will remain unchanged after normal switching until the next effective signal is triggered. This type of switch is controlled by the rising edge or falling edge of the pulse signal.

Features: DC-67GHz, High Isolation, 2M Cycles; **Applications:** Test Systems, Radar, Instrumentation.

Standard & High Performance Switches

How To Order:

QMSDUVTH-F-WXYZ

- DPDT & 2P3T: Reserved, Others: Blank
- Switch Type
- Connector Type
- Terminated: Reserved, Unterminated: Blank
- High Performance: Reserved, Standard: Blank
- Additional Options: TTL (T), Indicators (I), Extended Temperature (Z)
- Power Interface: Pin (0), D-Sub (1)
- Voltage (V): +12(E), +24(K), +28(M)
- Actuator Type: Failsafe (0), Latching (1), Normally Open (3)
- Stop Frequency (GHz)

Temperature: Standard Temperature: -25~+65°C; Extended Temperature: -45~+85°C.

Examples: To order a standard SP8T switch, SMA, terminated, DC~18GHz, normally open, +12V, D-Sub, TTL control, specify QMS8ST-18-3E1T.

SPDT

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMS21T-110-WXYZ	SPDT	1.0mm	Yes	Standard	DC~20 20~50 50~67 67~90 90~110	0.8 1.4 1.8 2.2 2.5	70 70 60 60 50	1.5 1.8 1.9 2.0 2.2	Latching	+12 +24	A2004WV-2×02P
QMS2V-67-WXYZ	SPDT	1.85mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50 50~67	0.2 0.3 0.4 0.6 0.7 0.8 0.9 1.2	70 70 60 55 50 50 45 40	1.2 1.3 1.4 1.6 1.7 1.8 1.9 2.2	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS22-50-WXYZ	SPDT	2.4mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.2 0.3 0.4 0.6 0.7 0.8 0.9	70 70 60 55 50 50 45	1.2 1.3 1.4 1.6 1.7 1.8 1.9	Failsafe Latching	+12 +24 +28	Pin
QMS22T-50-WXYZ	SPDT	2.4mm	Yes	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.3 0.4 0.5 0.6 0.7 0.9 1.0	70 60 55 50 50 50 45	1.3 1.4 1.5 1.6 1.7 1.9 2.0	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2K-40-WXYZ	SPDT	2.92mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.2 0.3 0.4 0.6 0.7 0.8	70 70 60 55 50 50	1.2 1.3 1.4 1.6 1.7 1.8	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2KH-40-WXYZ QMS2KH-43.5-WXYZ	SPDT	2.92mm	No	High PERF.	DC~26.5 26.5~40 DC~40 40~43.5	0.40 0.65 0.40 1.00	75 70 75 60	1.3 1.5 1.3 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMS2KT-40-WXYZ	SPDT	2.92mm	Yes	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.3 0.4 0.5 0.6 0.7 0.9	70 60 55 50 50 50	1.3 1.4 1.5 1.6 1.7 1.9	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2KTH-40-WXYZ QMS2KTH-43.5-WXYZ	SPDT	2.92mm	Yes	High PERF.	DC~26.5 26.5~40 DC~40 40~43.5	0.40 0.65 0.40 1.00	80 65 80 60	1.3 1.5 1.3 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2S-18-WXYZ QMS2S-26.5-WXYZ	SPDT	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.2 0.3 0.4 0.6	70 70 60 55	1.2 1.3 1.4 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2SH-18-WXYZ QMS2SH-26.5-WXYZ	SPDT	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.35 0.35 0.45	80 75 75 70	1.1 1.2 1.2 1.3	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2ST-18-WXYZ QMS2ST-26.5-WXYZ	SPDT	SMA	Yes	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.6	70 60 55 50	1.3 1.4 1.5 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMS2STH-18-WX0Z QMS2STH-26.5-WX0Z	SPDT	SMA	Yes	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.40 0.40 0.45	70 55 70 55	1.2 1.3 1.3 1.4	Failsafe Latching	+12 +24 +28	Pin
QMS2N-12.4-WXYZ QMS2N-18-WXYZ	SPDT	N	No	Standard	DC~5 5~12.4 DC~5 5~18	0.3 0.5 0.3 0.7	70 60 70 50	1.3 1.5 1.3 1.7	Failsafe Latching	+12 +24 +28	Pin D-Sub

SP3T~SP6T

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSU2-50-3X1Z	SP3T~SP6T	2.4mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.3 0.4 0.5 0.6 0.8 0.9 1.2	70 60 60 55 50 50 50	1.3 1.4 1.5 1.6 1.8 1.9 2.2	Normally Open	+12 +24 +28	D-Sub
QMSU2T-50-WX1Z	SP3T~SP6T	2.4mm	Yes	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.3 0.4 0.5 0.7 0.9 1.0 1.2	70 60 55 55 50 50 45	1.3 1.4 1.5 1.7 1.9 2.0 2.2	Latching Normally Open	+12 +24 +28	D-Sub
QMSUK-40-3X1Z	SP3T~SP6T	2.92mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.3 0.4 0.5 0.6 0.8 0.9	70 60 60 55 50 50	1.3 1.4 1.5 1.6 1.8 1.9	Normally Open	+12 +24 +28	D-Sub
QMSUKH-40-3X1Z QMSUKH-43.5-3X1Z	SP3T~SP6T	2.92mm	No	High PERF.	DC~26.5 26.5~40 DC~40 40~43.5	0.50 0.70 0.50 1.10	80 70 80 60	1.35 1.40 1.35 1.55	Normally Open	+12 +24 +28	D-Sub

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSUKT-40-WX1Z	SP3T~SP6T	2.92mm	Yes	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.3 0.4 0.5 0.7 0.8 0.9	70 60 55 55 50 50	1.3 1.4 1.5 1.7 1.8 1.9	Latching Normally Open	+12 +24 +28	D-Sub
QMSUKTH-40-WX1Z QMSUKTH-43.5-WX1Z	SP3T~SP6T	2.92mm	Yes	High PERF.	DC~26.5 26.5~40 DC~40 40~43.5	0.5 0.7 0.4 1.0	80 70 70 55	1.5 1.6 1.3 1.7	Latching Normally Open	+12 +24 +28	D-Sub
QMSUS-18-3X1Z QMSUS-26.5-3X1Z	SP3T~SP6T	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.6	70 60 50 50	1.3 1.4 1.5 1.6	Normally Open	+12 +24 +28	D-Sub
QMSUSH-18-3X1Z QMSUSH-26.5-3X1Z	SP3T~SP6T	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.25 0.35 0.35 0.50	80 75 80 70	1.20 1.30 1.30 1.35	Normally Open	+12 +24 +28	D-Sub
QMSUST-18-WX1Z QMSUST-26.5-WX1Z	SP3T~SP6T	SMA	Yes	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.6	70 60 50 50	1.3 1.4 1.5 1.6	Latching Normally Open	+12 +24 +28	D-Sub
QMSUSTH-18-WX1Z QMSUSTH-26.5-WX1Z	SP3T~SP6T	SMA	Yes	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.35 0.40 0.60	80 70 70 65	1.2 1.3 1.3 1.5	Latching Normally Open	+12 +24 +28	D-Sub
QMSUN-12.4-3X1Z	SP3T~SP6T	N	No	Standard	DC~5 5~12.4	0.3 0.5	70 60	1.3 1.5	Normally Open	+12 +24 +28	D-Sub

SP7T~SP8T

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSUK-40-3X1Z	SP7T~SP8T	2.92mm	No	Standard	DC~12 12~18 18~26.5 26.5~40	0.5 0.6 0.8 1.1	70 60 55 50	1.4 1.5 1.7 2.0	Normally Open	+12 +24 +28	D-Sub
QMSUKT-40-WX1Z	SP7T~SP8T	2.92mm	Yes	Standard	DC~12 12~18 18~26.5 26.5~40	0.5 0.6 0.8 1.1	70 60 55 50	1.4 1.5 1.7 2.0	Latching Normally Open	+12 +24 +28	D-Sub
QMSUS-18-3X1Z QMSUS-26.5-3X1Z	SP7T~SP8T	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.7	70 60 55 50	1.3 1.4 1.5 1.7	Normally Open	+12 +24 +28	D-Sub
QMSUSH-18-3X1Z QMSUSH-26.5-3X1Z	SP7T~SP8T	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.35 0.50 0.60	80 60 80 70	1.20 1.35 1.50 1.60	Normally Open	+12 +24 +28	D-Sub
QMSUST-18-WX1Z QMSUST-26.5-WX1Z	SP7T~SP8T	SMA	Yes	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.6	70 60 50 50	1.3 1.4 1.5 1.6	Latching Normally Open	+12 +24 +28	D-Sub
QMSUSTH-18-WX1Z QMSUSTH-26.5-WX1Z	SP7T~SP8T	SMA	Yes	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.40 0.45 0.60	80 70 80 70	1.15 1.50 1.40 1.40	Latching Normally Open	+12 +24 +28	D-Sub
QMSUN-8-3XYZ	SP7T~SP8T	N	No	Standard	DC~3 3~8	0.4 0.7	70 60	1.5 1.7	Normally Open	+12 +24	Pin D-Sub

SP9T~SP10T

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSUS-18-3X1Z QMSUS-26.5-3X1Z	SP9T~SP10T	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.7	70 60 55 50	1.3 1.4 1.5 1.7	Normally Open	+12 +24 +28	D-Sub
QMSUSH-18-3X1Z QMSUSH-26.5-3X1Z	SP9T~SP10T	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.3 0.5 0.5 0.6	80 70 80 70	1.2 1.3 1.4 1.5	Normally Open	+12 +24 +28	D-Sub
QMSUST-18-WX1Z QMSUST-26.5-WX1Z	SP9T~SP10T	SMA	Yes	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.7	70 60 50 50	1.3 1.4 1.5 1.7	Latching Normally Open	+12 +24 +28	D-Sub
QMSUSTH-18-WX1Z QMSUSTH-26.5-WX1Z	SP9T~SP10T	SMA	Yes	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.50 0.45 0.60	70 50 80 70	1.15 1.30 1.40 1.40	Latching Normally Open	+12 +24 +28	D-Sub

SP11T~SP12T

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMS12S-16-3X1Z	SP11T~SP12T	SMA	No	Standard	DC~6 6~12 12~16	0.3 0.4 0.6	70 60 50	1.3 1.4 1.6	Normally Open	+12 +24 +28	D-Sub
QMS12ST-16-WX1Z	SP11T~SP12T	SMA	Yes	Standard	DC~6 6~12 12~16	0.3 0.4 0.5	70 60 50	1.3 1.5 1.6	Latching Normally Open	+12 +24 +28	D-Sub

DPDT

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSD2V-53-WXYZ	DPDT	1.85mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~43 43~50 50~53	0.3 0.4 0.5 0.7 0.8 0.9 1.0 1.2 1.5	70 70 60 55 50 50 50 50 50	1.2 1.3 1.3 1.4 1.4 1.7 1.7 1.8 1.8	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD22-50-WXYZ	DPDT	2.4mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.3 0.4 0.5 0.7 0.8 0.9 1.0	70 60 55 50 50 50 45	1.3 1.4 1.5 1.7 1.8 1.9 2.0	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD2K-40-WXYZ	DPDT	2.92mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.3 0.4 0.5 0.7 0.8 0.9	70 60 55 50 50 50	1.3 1.4 1.5 1.7 1.8 1.9	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD2KH-40-WXYZ	DPDT	2.92mm	No	High PERF.	DC~26.5 26.5~40	0.35 0.70	70 60	1.3 1.5	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD2S-18-WXYZ QMSD2S-26.5-WXYZ	DPDT	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.7	70 60 55 50	1.3 1.4 1.5 1.7	Failsafe Latching	+12 +24 +28	Pin D-Sub

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSD2SH-18-WXYZ QMSD2SH-26.5-WXYZ	DPDT	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.25 0.40 0.40 0.50	75 70 70 65	1.1 1.2 1.3 1.5	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD2N-12.4-WXYZ	DPDT	N	No	Standard	DC~6 6~12.4	0.3 0.6	70 60	1.3 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub

2P3T

Coaxial switches power curve please refer to appendix.

Part Number	Switch Type	Connector	Terminated	Edition	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Actuator Type	Voltage (V)	Power Interface
QMSD32-50-WX0Z	2P3T	2.4mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40 40~50	0.3 0.4 0.5 0.6 0.7 0.9 1.0	70 60 55 50 50 50 45	1.3 1.4 1.5 1.6 1.7 1.9 2.0	Failsafe Latching	+12 +24 +28	Pin
QMSD3K-40-WX0Z	2P3T	2.92mm	No	Standard	DC~6 6~12 12~18 18~26.5 26.5~32 32~40	0.3 0.4 0.5 0.6 0.7 0.9	70 60 55 50 50 50	1.3 1.4 1.5 1.6 1.7 1.9	Failsafe Latching	+12 +24 +28	Pin
QMSD3KH-40-WXYZ QMSD3KH-43.5-WXYZ	2P3T	2.92mm	No	High PERF.	DC~26.5 26.5~40 DC~40 40~43.5	0.40 0.65 0.40 1.00	80 65 80 60	1.3 1.5 1.3 1.6	Failsafe Latching	+12 +24 +28	Pin D-Sub
QMSD3S-18-WX0Z QMSD3S-26.5-WX0Z	2P3T	SMA	No	Standard	DC~6 6~12 12~18 18~26.5	0.3 0.4 0.5 0.6	70 60 55 50	1.3 1.4 1.5 1.6	Failsafe Latching	+12 +24 +28	Pin
QMSD3SH-18-WX0Z QMSD3SH-26.5-WX0Z	2P3T	SMA	No	High PERF.	DC~6 6~18 DC~18 18~26.5	0.20 0.40 0.40 0.45	70 55 70 55	1.2 1.3 1.3 1.4	Failsafe Latching	+12 +24 +28	Pin

Manual Switches

Part Number	Switch Type	Connector	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR (max.)	Power (W)
QMS2S-18-2	SPDT	SMA	DC~18	0.5	60	1.5	20
QMS2N-12.4-2	SPDT	N	DC~3 3~6 6~12.4	0.2 0.4 0.6	70 65 50	1.2 1.35 1.5	200 150 80

Small Size Coaxial Switches

Part Number	Switch Type	Connector	Frequency (GHz)	IL. (dB)	ISO. (dB)	VSWR	Power (W)	Actuator Type	Voltage (V)	Power Interface
QSMSVS-18-3X1Z	SP3T~SP6T	SMA	DC~6 6~12 12~18	0.3 0.4 0.5	70 60 60	1.3 1.4 1.5	80 60 50	Normally Open	+12 +24 +28	D-Sub

75Ω Switches

How To Order:

QMSUV-F-WXYZ-P

- Switch Type
- Connector Type
- Stop Frequency (GHz)
- Actuator Type: Failsafe (0)
- Pannel Mount: Reserved, Others: Blank
- Additional Options: TTL (T), Indicators (I)
- Power Interface: Pin (0)
- Voltage (V): +5(Y), +12(E), +24(K), +28(M)

Examples: To order a SP8T switch, F Female, DC~2.15GHz, Failsafe, +12V, Pin, specify QMS8F-2.15-0E0.

Part Number	Switch Type	Connector	Frequency (GHz)	Insertion Loss (dB)	Isolation (dB)	VSWR	Power (W)	Actuator Type	Voltage (V)	Power Interface
QMS2V-F-0X0	SPDT	F BNC	DC~1 1~2 2~3	0.4 0.5 0.8	60 45 35	1.4 1.6 1.7	1	Failsafe	+12 +24	Pin
QMS2V-F-0X0-P	SPDT	F BNC	DC~1 1~2 2~3	0.2 0.5 0.8	60 40 30	1.2 1.5 1.7	1	Failsafe	+5 +12 +24	Pin
QMS4V-F-0X0	SP4T	F BNC	DC~1 1~2 2~3	0.3 0.5 1.1	60 50 40	1.2 1.4 1.6	10W @1G	Failsafe	+12 +24 +28	Pin
QMS8V-F-0E0	SP8T	F BNC	DC~1 1~2.15	0.8 1.2	60 50	1.5 1.6	10	Failsafe	+12	Pin

PIN Diode Switches

PIN diode switch, also called solid state switch.

Features: 0.02~40GHz, High Switching Speed, Low VSWR; **Applications:** Test Systems, Radar, Instrumentation.

How To Order:

QPSW-X-Y-Z

- Switch Type
- Start Frequency (MHz)
- Absorptive: A, Reflective: R
- Stop Frequency (MHz)

Examples: To order a PIN diode switch, SPDT, 0.1~4GHz, absorptive, specify QPS2-100-4000-A.

SPST

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS1-100-18000-A	Absorptive	0.1~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-100-40000-A	Absorptive	0.1~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-500-18000-A	Absorptive	0.5~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-500-18000-R	Reflective	0.5~18	40	2.5	1.8	70	0.2	SMA	24*18*10.2
QPS1-500-40000-A	Absorptive	0.5~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-800-18000-A	Absorptive	0.8~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-1000-2000-A	Absorptive	1~2	40	1	1.5	80	0.1	SMA	24*18*10.2
QPS1-1000-8000-A	Absorptive	1~8	40	1.6	1.5	80	0.1	SMA	24*18*10.2
QPS1-1000-18000-A	Absorptive	1~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-1000-20000-A	Absorptive	1~20	40	3	2	80	0.1	SMA	24*18*10.2
QPS1-1000-40000-A	Absorptive	1~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-2000-4000-A	Absorptive	2~4	40	1.2	1.5	80	0.1	SMA	24*18*10.2
QPS1-2000-18000-A	Absorptive	2~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-2000-20000-A	Absorptive	2~20	40	3	2	80	0.1	SMA	24*18*10.2
QPS1-2000-40000-A	Absorptive	2~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-2700-3100-A	Absorptive	2.7~3.1	100	1.1	1.5	75	1	SMA	30.48*22.86*8.89
QPS1-3000-6000-A	Absorptive	3~6	40	1.5	1.5	80	0.1	SMA	24*18*10.2
QPS1-4000-8000-A	Absorptive	4~8	40	1.6	1.5	80	0.1	SMA	24*18*10.2
QPS1-5000-10000-A	Absorptive	5~10	40	1.8	1.5	80	0.1	SMA	24*18*10.2
QPS1-6000-12000-A	Absorptive	6~12	40	2.2	1.7	80	0.1	SMA	24*18*10.2
QPS1-6000-18000-A	Absorptive	6~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-8000-40000-A	Absorptive	8~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-12000-18000-A	Absorptive	12~18	40	2.5	2	80	0.1	SMA	24*18*10.2
QPS1-18000-40000-A	Absorptive	18~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2
QPS1-20000-40000-A	Absorptive	20~40	300	6	2.5	40	1	2.92mm	35*23*12.7
QPS1-26000-40000-A	Absorptive	26~40	50	5	2.5	45	0.2	2.92mm	20*14*10.2

SPDT

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS2-0-3000-R	Reflective	DC~3	150	1	1.3	31	39.8	SMA	40*34*9.5
QPS2-0-6000-R	Reflective	DC~6	150	1.3	1.5	23	39.8	SMA	40*34*9.5
QPS2-0.95-200-A	Absorptive	950K~0.2	1000	1	1.5	40	2	SMA	36*25*13
QPS2-0.95-200-R	Reflective	950K~0.2	100	1	1.5	40	3	SMA	33.67*20.54*12.11
QPS2-10-6000-A-1	Absorptive	0.01~6	150	2.5	2	60	1	SMA	25*17.5*10.2
QPS2-10-8000-A-1	Absorptive	0.01~8	150	2.5	2	60	1	SMA	25*17.5*10.2
QPS2-10-8000-R-1	Reflective	0.01~8	150	2	2	75	1	SMA	25*17.5*10.2
QPS2-10-12000-A-1	Absorptive	0.01~12	150	3	2	60	1	SMA	25*17.5*10.2
QPS2-10-12000-R-1	Reflective	0.01~12	150	2.3	2	70	1	SMA	25*17.5*10.2
QPS2-10-18000-A-1	Absorptive	0.01~18	150	3.8	2	60	1	SMA	25*17.5*10.2
QPS2-10-18000-R-1	Reflective	0.01~18	150	3	2	65	1	SMA	25*17.5*10.2
QPS2-10-20000-A-1	Absorptive	0.01~20	150	4.2	2	60	1	SMA	25*17.5*10.2
QPS2-10-20000-R-1	Reflective	0.01~20	150	3.2	2	65	1	SMA	25*17.5*10.2
QPS2-14-1000-A	Absorptive	0.014~1	3500	1.5	1.6	65	5	SMA	44*35*9.5
QPS2-30-500-R	Reflective	0.03~0.5	1000	0.3	1.5	55	50	SMA	70*60*22
QPS2-100-4000-A	Absorptive	0.1~4	100	1.8	1.5	35	1	SMA	30*30*12
QPS2-100-18000-A-1	Absorptive	0.1~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-100-18000-R-1	Reflective	0.1~18	100	2.8	2	60	1	SMA	25*17.5*10.2

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS2-100-20000-A-1	Absorptive	0.1~20	100	3.5	2	60	1	SMA	25*17.5*10.2
QPS2-100-20000-R-1	Reflective	0.1~20	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-300-18000-A	Absorptive	0.3~18	35	3.5	2	60	0.1	SMA	25*17.5*10.2
QPS2-400-8000-A-1	Absorptive	0.4~8	100	1.5	1.5	80	1	SMA	25*17.5*10.2
QPS2-400-8000-A-2	Absorptive	0.4~8	100	1.5	1.5	80	1	SMA	26*18*10.2
QPS2-400-8000-R-1	Reflective	0.4~8	100	1.8	1.5	70	1	SMA	25*17.5*10.2
QPS2-400-12000-A-1	Absorptive	0.4~12	100	2.4	1.5	70	1	SMA	25*17.5*10.2
QPS2-400-12000-A-2	Absorptive	0.4~12	100	2.4	1.5	70	1	SMA	26*18*10.2
QPS2-400-12000-R-1	Reflective	0.4~12	100	2.2	1.5	70	1	SMA	25*17.5*10.2
QPS2-500-2500-R	Reflective	0.5~2.5	12ms	1	1.5	45	15	SMA	50.8*57.16*17.78
QPS2-500-18000-A-1	Absorptive	0.5~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-500-18000-A-2	Absorptive	0.5~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-500-18000-R-1	Reflective	0.5~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-500-18000-R-2	Reflective	0.5~18	100	2.8	2	70	1	SMA	26*18*10.2
QPS2-500-20000-A-1	Absorptive	0.5~20	100	3.5	2	60	1	SMA	25*17.5*10.2
QPS2-500-20000-A-2	Absorptive	0.5~20	100	3.5	2	60	1	SMA	26*18*10.2
QPS2-500-20000-A-3	Absorptive	0.5~20	35	3.5	2	60	0.1	SMA	25*17.5*10.2
QPS2-500-20000-R-1	Reflective	0.5~20	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-500-20000-R-2	Reflective	0.5~20	100	3	2	70	1	SMA	26*18*10.2
QPS2-500-40000-A-1	Absorptive	0.5~40	50	5.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-500-40000-R-1	Reflective	0.5~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-800-18000-A-1	Absorptive	0.8~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-800-18000-A-2	Absorptive	0.8~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-800-18000-R-1	Reflective	0.8~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-800-20000-A-1	Absorptive	0.8~20	100	3.5	2	60	1	SMA	25*17.5*10.2
QPS2-800-20000-A-2	Absorptive	0.8~20	100	3.5	2	60	1	SMA	26*18*10.2
QPS2-800-20000-A-3	Absorptive	0.8~20	40	3	2	60	0.1	SMA	25*17.5*10.2
QPS2-800-20000-A-4	Absorptive	0.8~20	35	3.5	2	60	0.1	SMA	25*17.5*10.2
QPS2-800-20000-R-1	Reflective	0.8~20	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-1000-2000-A-1	Absorptive	1~2	100	1	1.5	80	1	SMA	25*17.5*10.2
QPS2-1000-2000-A-2	Absorptive	1~2	100	1	1.4	80	1	SMA	26*18*10.2
QPS2-1000-2000-A-3	Absorptive	1~2	40	1	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-1000-2000-A-4	Absorptive	1~2	35	1	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-1000-2000-R-1	Reflective	1~2	100	1	1.5	80	1	SMA	25*17.5*10.2
QPS2-1000-2000-R-2	Reflective	1~2	100	1	1.5	80	1	SMA	26*18*10.2
QPS2-1000-8000-A-1	Absorptive	1~8	100	1.5	1.5	80	1	SMA	25*17.5*10.2
QPS2-1000-8000-A-2	Absorptive	1~8	100	1.5	1.5	80	1	SMA	26*18*10.2
QPS2-1000-8000-A-3	Absorptive	1~8	40	1.6	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-1000-8000-A-4	Absorptive	1~8	35	1.6	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-1000-8000-R-1	Reflective	1~8	100	1.8	1.5	70	1	SMA	25*17.5*10.2
QPS2-1000-8000-R-2	Reflective	1~8	100	1.8	1.5	80	1	SMA	26*18*10.2
QPS2-1000-18000-A-1	Absorptive	1~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-1000-18000-A-2	Absorptive	1~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-1000-18000-A-3	Absorptive	1~18	40	2.5	1.8	65	0.1	SMA	25*17.5*10.2
QPS2-1000-18000-A-4	Absorptive	1~18	35	2.8	2	60	0.1	SMA	25*17.5*10.2
QPS2-1000-18000-R-1	Reflective	1~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-1000-18000-R-2	Reflective	1~18	100	2.8	2	70	1	SMA	26*18*10.2
QPS2-1000-20000-A-1	Absorptive	1~20	100	3.5	2	60	1	SMA	25*17.5*10.2
QPS2-1000-20000-A-2	Absorptive	1~20	100	3.5	2	60	1	SMA	26*18*10.2
QPS2-1000-20000-A-3	Absorptive	1~20	40	3	2	60	0.1	SMA	25*17.5*10.2
QPS2-1000-20000-A-4	Absorptive	1~20	35	3.5	2	60	0.1	SMA	25*17.5*10.2
QPS2-1000-20000-R-1	Reflective	1~20	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-1000-20000-R-2	Reflective	1~20	100	3	2	70	1	SMA	26*18*10.2
QPS2-1000-40000-A	Absorptive	1~40	50	5.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-1000-40000-R	Reflective	1~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-2000-4000-A-1	Absorptive	2~4	100	1.2	1.5	80	1	SMA	25*17.5*10.2
QPS2-2000-4000-A-2	Absorptive	2~4	100	1.2	1.4	80	1	SMA	26*18*10.2
QPS2-2000-4000-A-3	Absorptive	2~4	40	1.2	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-2000-4000-A-4	Absorptive	2~4	35	1.2	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-2000-4000-R-1	Reflective	2~4	100	1.2	1.5	80	1	SMA	25*17.5*10.2
QPS2-2000-4000-R-2	Reflective	2~4	100	1.2	1.5	80	1	SMA	26*18*10.2
QPS2-2000-8000-R	Reflective	2~8	100	1.8	1.5	80	1	SMA	26*18*10.2
QPS2-2000-18000-A-1	Absorptive	2~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-2000-18000-A-2	Absorptive	2~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-2000-18000-A-3	Absorptive	2~18	40	2.5	1.8	65	0.1	SMA	25*17.5*10.2
QPS2-2000-18000-A-4	Absorptive	2~18	35	2.8	2	60	0.1	SMA	25*17.5*10.2

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS2-2000-18000-R-1	Reflective	2~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-2000-18000-R-2	Reflective	2~18	100	2.8	2	70	1	SMA	26*18*10.2
QPS2-2000-20000-A-1	Absorptive	2~20	100	3.5	2	60	1	SMA	25*17.5*10.2
QPS2-2000-20000-A-2	Absorptive	2~20	100	3.5	2	60	1	SMA	26*18*10.2
QPS2-2000-20000-A-3	Absorptive	2~20	40	3	2	60	0.1	SMA	25*17.5*10.2
QPS2-2000-20000-A-4	Absorptive	2~20	35	3.5	2	60	0.1	SMA	25*17.5*10.2
QPS2-2000-20000-R-1	Reflective	2~20	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-2000-20000-R-2	Reflective	2~20	100	3	2	70	1	SMA	26*18*10.2
QPS2-2000-40000-A	Absorptive	2~40	50	5.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-2000-40000-R-1	Reflective	2~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-2000-40000-R-2	Reflective	2~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-2700-3100-A	Absorptive	2.7~3.1	100	1.3	1.3	75	1	SMA	30.48*22.86*8.89
QPS2-3000-6000-A-1	Absorptive	3~6	100	1.4	1.5	80	1	SMA	25*17.5*10.2
QPS2-3000-6000-A-2	Absorptive	3~6	100	1.4	1.5	80	1	SMA	26*18*10.2
QPS2-3000-6000-A-3	Absorptive	3~6	40	1.5	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-3000-6000-A-4	Absorptive	3~6	35	1.5	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-3000-6000-R-1	Reflective	3~6	100	1.6	1.5	70	1	SMA	25*17.5*10.2
QPS2-3000-6000-R-2	Reflective	3~6	100	1.6	1.5	80	1	SMA	26*18*10.2
QPS2-4000-8000-A-1	Absorptive	4~8	100	1.5	1.5	80	1	SMA	25*17.5*10.2
QPS2-4000-8000-A-2	Absorptive	4~8	100	1.5	1.5	80	1	SMA	26*18*10.2
QPS2-4000-8000-A-3	Absorptive	4~8	40	1.6	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-4000-8000-A-4	Absorptive	4~8	35	1.6	1.5	80	0.1	SMA	25*17.5*10.2
QPS2-4000-8000-R-1	Reflective	4~8	100	1.8	1.5	70	1	SMA	25*17.5*10.2
QPS2-4000-8000-R-2	Reflective	4~8	100	1.8	1.5	80	1	SMA	26*18*10.2
QPS2-5000-10000-A-1	Absorptive	5~10	100	2	1.5	70	1	SMA	25*17.5*10.2
QPS2-5000-10000-A-2	Absorptive	5~10	100	2	1.5	70	1	SMA	26*18*10.2
QPS2-5000-10000-A-3	Absorptive	5~10	40	1.8	1.5	75	0.1	SMA	25*17.5*10.2
QPS2-5000-10000-A-4	Absorptive	5~10	35	1.8	1.5	75	0.1	SMA	25*17.5*10.2
QPS2-5000-10000-R-1	Reflective	5~10	100	2	1.5	70	1	SMA	25*17.5*10.2
QPS2-5000-10000-R-2	Reflective	5~10	100	2	1.5	80	1	SMA	26*18*10.2
QPS2-6000-12000-A-1	Absorptive	6~12	100	2.4	1.5	70	1	SMA	25*17.5*10.2
QPS2-6000-12000-A-2	Absorptive	6~12	100	2.4	1.5	70	1	SMA	26*18*10.2
QPS2-6000-12000-A-3	Absorptive	6~12	40	2.2	1.7	70	0.1	SMA	25*17.5*10.2
QPS2-6000-12000-A-4	Absorptive	6~12	35	2.2	1.7	70	0.1	SMA	25*17.5*10.2
QPS2-6000-12000-R-1	Reflective	6~12	100	2.2	1.5	70	1	SMA	25*17.5*10.2
QPS2-6000-12000-R-2	Reflective	6~12	100	2.2	1.5	80	1	SMA	26*18*10.2
QPS2-6000-18000-A-1	Absorptive	6~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-6000-18000-A-2	Absorptive	6~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-6000-18000-A-3	Absorptive	6~18	40	2.5	1.8	65	0.1	SMA	25*17.5*10.2
QPS2-6000-18000-A-4	Absorptive	6~18	35	2.8	2	60	0.1	SMA	25*17.5*10.2
QPS2-6000-18000-R-1	Reflective	6~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-6000-40000-A-1	Absorptive	6~40	50	5	2.5	45	0.2	2.92mm	22*13*9.5
QPS2-6000-40000-R-1	Reflective	6~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-8000-12000-R-1	Reflective	8~12	100	2.2	1.5	80	1	SMA	26*18*10.2
QPS2-10000-40000-R-1	Reflective	10~40	50	4.5	2.5	65	0.2	2.92mm	22*13*9.5
QPS2-12000-18000-A-1	Absorptive	12~18	100	3	2	60	1	SMA	25*17.5*10.2
QPS2-12000-18000-A-2	Absorptive	12~18	100	3	2	60	1	SMA	26*18*10.2
QPS2-12000-18000-A-3	Absorptive	12~18	40	2.5	1.8	65	0.1	SMA	25*17.5*10.2
QPS2-12000-18000-A-4	Absorptive	12~18	35	2.8	2	60	0.1	SMA	25*17.5*10.2
QPS2-12000-18000-R-1	Reflective	12~18	100	2.8	2	60	1	SMA	25*17.5*10.2
QPS2-12000-18000-R-2	Reflective	12~18	100	2.8	2	70	1	SMA	26*18*10.2
QPS2-18000-40000-A-1	Absorptive	18~40	50	5	2.5	45	0.2	2.92mm	22*13*9.5

SP3T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS3-20-18000-A	Absorptive	0.02~18	250	5	2	60	1	SMA	40*25*12.5
QPS3-100-20000-A	Absorptive	0.1~20	100	3.8	2	80	1	SMA	40*20*10.2
QPS3-100-40000-A	Absorptive	0.1~40	50	5	2.8	60	0.2	2.92mm	24*20*12
QPS3-100-40000-R	Reflective	0.1~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-380-18000-A	Absorptive	0.38~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-500-18000-A	Absorptive	0.5~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-500-18000-R	Reflective	0.5~18	100	2.8	2	80	1	SMA	40*20*10.2
QPS3-500-20000-A	Absorptive	0.5~20	100	3.8	2	80	1	SMA	40*20*10.2
QPS3-500-20000-R	Reflective	0.5~20	100	3.2	2	80	1	SMA	40*20*10.2

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS3-500-40000-A	Absorptive	0.5~40	50	5	2.8	60	0.2	2.92mm	24*20*12
QPS3-500-40000-R	Reflective	0.5~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-500-43500-A	Absorptive	0.5~43.5	50	5.5	2.8	60	0.2	2.92mm	24*20*12
QPS3-500-43500-R	Reflective	0.5~43.5	100	4	2.2	45	0.2	2.92mm	24*20*12
QPS3-800-6000-A	Absorptive	0.8~6	100	1.8	1.5	80	1	SMA	40*20*10.2
QPS3-800-18000-A	Absorptive	0.8~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-1000-2000-R	Reflective	1~2	100	1.1	1.5	80	1	SMA	40*20*10.2
QPS3-1000-8000-A	Absorptive	1~8	100	2	1.5	80	1	SMA	40*20*10.2
QPS3-1000-8000-R	Reflective	1~8	100	1.8	1.5	80	1	SMA	40*20*10.2
QPS3-1000-18000-A	Absorptive	1~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-1000-18000-R	Reflective	1~18	100	2.8	2	80	1	SMA	40*20*10.2
QPS3-1000-20000-A	Absorptive	1~20	100	3.8	2	80	1	SMA	40*20*10.2
QPS3-1000-20000-R	Reflective	1~20	100	3.2	2	80	1	SMA	40*20*10.2
QPS3-1000-40000-A	Absorptive	1~40	50	5	2.8	60	0.2	2.92mm	24*20*12
QPS3-1000-40000-R	Reflective	1~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-2000-4000-A	Absorptive	2~4	100	1.5	1.5	80	1	SMA	40*20*10.2
QPS3-2000-4000-R	Reflective	2~4	100	1.3	1.5	80	1	SMA	40*20*10.2
QPS3-2000-8000-A	Absorptive	2~8	100	2	1.5	80	1	SMA	40*20*10.2
QPS3-2000-8000-R	Reflective	2~8	100	1.8	1.5	80	1	SMA	40*20*10.2
QPS3-2000-18000-A	Absorptive	2~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-2000-18000-R	Reflective	2~18	100	2.8	2	80	1	SMA	40*20*10.2
QPS3-2000-20000-A	Absorptive	2~20	100	3.8	2	80	1	SMA	40*20*10.2
QPS3-2000-20000-R	Reflective	2~20	100	3.2	2	80	1	SMA	40*20*10.2
QPS3-2000-40000-A	Absorptive	2~40	50	5	2.8	60	0.2	2.92mm	24*20*12
QPS3-2000-40000-R	Reflective	2~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-3000-6000-A	Absorptive	3~6	100	1.8	1.5	80	1	SMA	40*20*10.2
QPS3-3000-6000-R	Reflective	3~6	100	1.5	1.5	80	1	SMA	40*20*10.2
QPS3-4000-8000-A	Absorptive	4~8	100	2	1.5	80	1	SMA	40*20*10.2
QPS3-4000-8000-R	Reflective	4~8	100	1.8	1.5	80	1	SMA	40*20*10.2
QPS3-5000-10000-A	Absorptive	5~10	100	2.5	1.5	80	1	SMA	40*20*10.2
QPS3-5000-10000-R	Reflective	5~10	100	2	1.8	80	1	SMA	40*20*10.2
QPS3-6000-12000-A	Absorptive	6~12	100	2.6	1.8	80	1	SMA	40*20*10.2
QPS3-6000-40000-A	Absorptive	6~40	50	5	2.8	60	0.2	2.92mm	24*20*12
QPS3-6000-40000-R	Reflective	6~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-8000-12000-A	Absorptive	8~12	100	2.6	1.8	80	1	SMA	40*20*10.2
QPS3-8000-12000-R	Reflective	8~12	100	2.3	1.8	80	1	SMA	40*20*10.2
QPS3-10000-40000-A	Absorptive	10~40	50	5	2.2	60	0.2	2.92mm	24*20*12
QPS3-10000-40000-R	Reflective	10~40	100	3.5	2	45	0.2	2.92mm	24*20*12
QPS3-12000-18000-A	Absorptive	12~18	100	3.5	2	80	1	SMA	40*20*10.2
QPS3-12000-18000-R	Reflective	12~18	100	2.8	2	80	1	SMA	40*20*10.2
QPS3-26000-40000-A	Absorptive	26~40	50	5	2	60	0.2	2.92mm	24*20*12
QPS3-26000-40000-R	Reflective	26~40	100	3.5	2	45	0.2	2.92mm	24*20*12

SP4T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS4-10-20000-A	Absorptive	0.01~20	200	5.5	2	60	0.5	SMA	52*20*10.2
QPS4-100-40000-A	Absorptive	0.1~40	100	6	3	65	0.2	2.92mm	50.8*20*10.2
QPS4-100-40000-R	Reflective	0.1~40	150	5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-200-35000-A	Absorptive	0.2~35	100	5.5	2.5	60	0.2	2.92mm	50.8*20*10.2
QPS4-200-35000-R	Reflective	0.2~35	150	5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-400-8000-A	Absorptive	0.4~8	100	2	1.7	60	1	SMA	52*20*10.2
QPS4-500-18000-A-1	Absorptive	0.5~18	100	3.2	2	75	1	SMA	31.75*31.75*12
QPS4-500-18000-A	Absorptive	0.5~18	100	3.5	2	60	1	SMA	52*20*10.2
QPS4-500-18000-R	Reflective	0.5~18	100	3.3	2	80	1	SMA	52*20*10.2
QPS4-500-20000-A	Absorptive	0.5~20	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS4-500-24000-A	Absorptive	0.5~24	100	4	2.5	60	0.2	2.92mm	50.8*20*10.2
QPS4-500-24000-R	Reflective	0.5~24	150	4	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-500-26500-A	Absorptive	0.5~26.5	100	4.7	2.7	65	0.2	2.92mm	50.8*20*10.2
QPS4-500-26500-R	Reflective	0.5~26.5	150	4	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-500-40000-A-1	Absorptive	0.5~40	100	6	2.7	65	0.2	2.92mm	50.8*20*10.2

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS4-500-40000-A-2	Absorptive	0.5~40	50	6.5	3	70	0.2	2.92mm	31.18*27*12
QPS4-500-40000-A	Absorptive	0.5~40	100	6	2.7	65	0.2	2.92mm	50.8*20*10.2
QPS4-500-40000-R	Reflective	0.5~40	150	5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-500-43500-A	Absorptive	0.5~43.5	100	6.5	3	65	0.2	2.4mm	50.8*20*10.2
QPS4-500-43500-R	Reflective	0.5~43.5	150	5.8	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-800-18000-R	Reflective	0.8~18	100	3.3	2	75	1	SMA	52*20*10.2
QPS4-800-30000-R	Reflective	0.8~30	150	4.5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-1000-2000-A	Absorptive	1~2	100	1.2	1.5	80	1	SMA	31.75*31.75*12
QPS4-1000-2000-R	Reflective	1~2	100	1.2	1.5	80	1	SMA	52*20*10.2
QPS4-1000-8000-A	Absorptive	1~8	100	2	1.5	80	1	SMA	31.75*31.75*12
QPS4-1000-8000-R	Reflective	1~8	100	2.2	1.8	80	1	SMA	52*20*10.2
QPS4-1000-18000-A	Absorptive	1~18	100	3.2	2	75	1	SMA	31.75*31.75*12
QPS4-1000-18000-R	Reflective	1~18	100	3.3	2	75	1	SMA	52*20*10.2
QPS4-1000-20000-A	Absorptive	1~20	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS4-1000-20000-R	Reflective	1~20	100	3.5	2	75	1	SMA	52*20*10.2
QPS4-1000-40000-A-1	Absorptive	1~40	100	6	2.7	65	0.2	2.92mm	50.8*20*10.2
QPS4-1000-40000-A-2	Absorptive	1~40	50	6.5	3	70	0.2	2.92mm	31.18*27*12
QPS4-1000-40000-R	Reflective	1~40	150	5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-2000-4000-A	Absorptive	2~4	100	1.6	1.5	80	1	SMA	31.75*31.75*12
QPS4-2000-4000-R	Reflective	2~4	100	1.5	1.8	80	1	SMA	52*20*10.2
QPS4-2000-8000-A	Absorptive	2~8	100	2	1.5	80	1	SMA	31.75*31.75*12
QPS4-2000-8000-R	Reflective	2~8	100	2.2	1.8	80	1	SMA	52*20*10.2
QPS4-2000-18000-A	Absorptive	2~18	100	3.2	2	75	1	SMA	31.75*31.75*12
QPS4-2000-18000-R	Reflective	2~18	100	3.3	2	75	1	SMA	52*20*10.2
QPS4-2000-20000-A	Absorptive	2~20	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS4-2000-20000-R	Reflective	2~20	100	3.5	2	75	1	SMA	52*20*10.2
QPS4-2000-40000-A-1	Absorptive	2~40	100	6	2.7	65	0.2	2.92mm	50.8*20*10.2
QPS4-2000-40000-A-2	Absorptive	2~40	50	6.5	3	70	0.2	2.92mm	31.18*27*12
QPS4-2000-40000-R	Reflective	2~40	150	5	2.2	60	0.2	2.92mm	50.8*20*10.2
QPS4-3000-6000-A	Absorptive	3~6	100	1.8	1.5	80	1	SMA	31.75*31.75*12
QPS4-4000-8000-A	Absorptive	4~8	100	2	1.5	80	1	SMA	31.75*31.75*12
QPS4-4000-8000-R	Reflective	4~8	100	2.2	1.8	80	1	SMA	52*20*10.2
QPS4-5000-10000-A	Absorptive	5~10	100	2.4	1.7	80	1	SMA	31.75*31.75*12
QPS4-5000-10000-R	Reflective	5~10	100	2.4	1.8	80	1	SMA	52*20*10.2
QPS4-6000-12000-A	Absorptive	6~12	100	2.5	1.7	80	1	SMA	31.75*31.75*12
QPS4-6000-12000-R	Reflective	6~12	100	2.6	2	80	1	SMA	52*20*10.2
QPS4-6000-40000-A	Absorptive	6~40	100	6	2.7	65	0.2	2.92mm	50.8*20*10.2
QPS4-8000-12000-A	Absorptive	8~12	100	2.5	1.7	80	1	SMA	31.75*31.75*12
QPS4-8000-18000-R	Reflective	8~18	100	3.3	2	75	1	SMA	52*20*10.2
QPS4-8000-40000-A	Absorptive	8~40	50	6.5	3	60	0.2	2.92mm	31.18*27*12
QPS4-8000-40000-R	Reflective	8~40	100	5.5	2.5	60	0.2	2.92mm	31.18*27*12
QPS4-10000-40000-A	Absorptive	10~40	100	6	2	65	0.2	2.92mm	50.8*20*10.2
QPS4-12000-18000-A	Absorptive	12~18	100	3.2	2	75	1	SMA	31.75*31.75*12
QPS4-26000-40000-A	Absorptive	26~40	100	6	2	65	0.2	2.92mm	50.8*20*10.2

SP5T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS5-100-18000-A	Absorptive	0.1~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-100-18000-A-1	Absorptive	0.1~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-100-18000-R	Reflective	0.1~18	120	3	2	60	1	SMA	65*22*10.2
QPS5-300-20000-A	Absorptive	0.3~20	100	3.7	2	75	1	SMA	31.75*31.75*12
QPS5-400-8000-A	Absorptive	0.4~8	120	2.2	1.5	70	1	SMA	65*22*10.2
QPS5-400-8000-R	Reflective	0.4~8	120	2	1.5	70	1	SMA	65*22*10.2
QPS5-400-12000-A	Absorptive	0.4~12	120	2.8	1.7	65	1	SMA	65*22*10.2
QPS5-400-12000-R	Reflective	0.4~12	120	2.4	1.7	65	1	SMA	65*22*10.2
QPS5-500-18000-A	Absorptive	0.5~18	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS5-500-20000-A	Absorptive	0.5~20	100	3.7	2	75	1	SMA	31.75*31.75*12
QPS5-500-40000-R	Reflective	0.5~40	100	6.5	2.5	60	0.2	2.92mm	65*20*10.2
QPS5-1000-2000-A-1	Absorptive	1~2	120	1.5	1.5	80	1	SMA	65*22*10.2
QPS5-1000-2000-A-2	Absorptive	1~2	100	1.2	1.5	80	1	SMA	31.75*31.75*12

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS5-1000-2000-R	Reflective	1~2	120	1.2	1.5	80	1	SMA	65*22*10.2
QPS5-1000-8000-A-1	Absorptive	1~8	120	2.2	1.5	70	1	SMA	65*22*10.2
QPS5-1000-8000-A-2	Absorptive	1~8	100	2.2	1.5	80	1	SMA	31.75*31.75*12
QPS5-1000-8000-R	Reflective	1~8	120	2	1.5	70	1	SMA	65*22*10.2
QPS5-1000-18000-A-1	Absorptive	1~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-1000-18000-A-2	Absorptive	1~18	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS5-1000-18000-R	Reflective	1~18	120	3	2	60	1	SMA	65*22*10.2
QPS5-1000-20000-A	Absorptive	1~20	100	3.7	2	75	1	SMA	31.75*31.75*12
QPS5-1000-40000-R	Reflective	1~40	100	6.5	2.5	60	0.2	2.92mm	65*20*10.2
QPS5-2000-4000-A-1	Absorptive	2~4	120	1.8	1.5	80	1	SMA	65*22*10.2
QPS5-2000-4000-R	Reflective	2~4	100	1.7	1.5	80	1	SMA	65*22*10.2
QPS5-2000-4000-A-2	Absorptive	2~4	100	1.7	1.5	80	1	SMA	31.75*31.75*12
QPS5-2000-8000-A-1	Absorptive	2~8	120	2.2	1.5	70	1	SMA	65*22*10.2
QPS5-2000-8000-A-2	Absorptive	2~8	100	2.2	1.5	80	1	SMA	31.75*31.75*12
QPS5-2000-8000-R	Reflective	2~8	120	2	1.5	70	1	SMA	65*22*10.2
QPS5-2000-18000-A-1	Absorptive	2~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-2000-18000-A-2	Absorptive	2~18	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS5-2000-18000-R	Reflective	2~18	120	3	2	60	1	SMA	65*22*10.2
QPS5-2000-20000-A	Absorptive	2~20	100	3.7	2	75	1	SMA	31.75*31.75*12
QPS5-2000-40000-R	Reflective	2~40	100	6.5	2.5	60	0.2	2.92mm	65*20*10.2
QPS5-3000-6000-A-1	Absorptive	3~6	120	2	1.5	75	1	SMA	65*22*10.2
QPS5-3000-6000-A-2	Absorptive	3~6	100	1.8	1.5	80	1	SMA	31.75*31.75*12
QPS5-3000-6000-R	Reflective	3~6	120	1.5	1.5	70	1	SMA	65*22*10.2
QPS5-4000-8000-A-1	Absorptive	4~8	120	2.2	1.5	70	1	SMA	65*22*10.2
QPS5-4000-8000-A-2	Absorptive	4~8	100	2.2	1.5	80	1	SMA	31.75*31.75*12
QPS5-4000-8000-R	Reflective	4~8	120	2	1.5	70	1	SMA	65*22*10.2
QPS5-5000-10000-A-1	Absorptive	5~10	120	2.6	1.7	70	1	SMA	65*22*10.2
QPS5-5000-10000-A-2	Absorptive	5~10	100	2.5	1.7	80	1	SMA	31.75*31.75*12
QPS5-5000-10000-R	Reflective	5~10	120	2.2	1.7	65	1	SMA	65*22*10.2
QPS5-6000-12000-A-1	Absorptive	6~12	120	2.8	1.7	65	1	SMA	65*22*10.2
QPS5-6000-12000-A-2	Absorptive	6~12	100	2.8	1.7	80	1	SMA	31.75*31.75*12
QPS5-6000-12000-R	Reflective	6~12	120	2.4	1.7	65	1	SMA	65*22*10.2
QPS5-6000-18000-A	Absorptive	6~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-6000-18000-R	Reflective	6~18	120	3	2	60	1	SMA	65*22*10.2
QPS5-6000-40000-R	Reflective	6~40	100	6.5	2.5	60	0.2	2.92mm	65*20*10.2
QPS5-8000-12000-A	Absorptive	8~12	100	2.8	1.7	80	1	SMA	31.75*31.75*12
QPS5-12000-18000-A-1	Absorptive	12~18	120	3.5	2	60	1	SMA	65*22*10.2
QPS5-12000-18000-A-2	Absorptive	12~18	100	3.5	2	75	1	SMA	31.75*31.75*12
QPS5-12000-18000-R	Reflective	12~18	120	3	2	60	1	SMA	65*22*10.2
QPS5-18000-40000-R	Reflective	18~40	100	6.5	2.5	60	0.2	2.92mm	65*20*10.2

SP6T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS6-100-12000-A	Absorptive	0.1~12	120	3.2	1.7	70	1	SMA	78*24*10.2
QPS6-100-18000-A	Absorptive	0.1~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-100-20000-A	Absorptive	0.1~20	120	4.5	2	60	1	SMA	78*24*10.2
QPS6-400-8000-A	Absorptive	0.4~8	120	2.5	2	80	1	SMA	78*24*10.2
QPS6-400-18000-A	Absorptive	0.4~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-500-18000-A	Absorptive	0.5~18	100	3.2	1.7	60	1	SMA	31.75*31.75*12
QPS6-500-20000-A-1	Absorptive	0.5~20	120	4.5	2	60	1	SMA	78*24*10.2
QPS6-500-20000-A-2	Absorptive	0.5~20	100	3.6	2	60	1	SMA	31.75*31.75*12
QPS6-800-18000-A	Absorptive	0.8~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-800-20000-A	Absorptive	0.8~20	120	4.5	2	60	1	SMA	78*24*10.2
QPS6-1000-2000-A-1	Absorptive	1~2	120	1.3	1.5	75	1	SMA	78*24*10.2
QPS6-1000-2000-A-2	Absorptive	1~2	100	1.3	1.5	80	1	SMA	31.75*31.75*12
QPS6-1000-8000-A-1	Absorptive	1~8	120	2.5	1.5	65	1	SMA	78*24*10.2
QPS6-1000-8000-A-2	Absorptive	1~8	100	2.2	1.7	70	1	SMA	31.75*31.75*12
QPS6-1000-18000-A	Absorptive	1~18	100	4.2	2	70	1	SMA	78*24*10.2
QPS6-1000-18000-A-1	Absorptive	1~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-1000-18000-A-2	Absorptive	1~18	100	3.2	2	60	1	SMA	31.75*31.75*12

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS6-1000-20000-A-1	Absorptive	1~20	120	4.5	2	60	1	SMA	78*24*10.2
QPS6-1000-20000-A-2	Absorptive	1~20	100	3.6	2	60	1	SMA	31.75*31.75*12
QPS6-2000-4000-A-1	Absorptive	2~4	120	1.8	1.5	75	1	SMA	78*24*10.2
QPS6-2000-4000-A-2	Absorptive	2~4	100	1.5	1.5	80	1	SMA	31.75*31.75*12
QPS6-2000-8000-A-1	Absorptive	2~8	120	2.5	1.5	65	1	SMA	78*24*10.2
QPS6-2000-8000-A-2	Absorptive	2~8	100	2.2	1.7	70	1	SMA	31.75*31.75*12
QPS6-2000-12000-A	Absorptive	2~12	120	3.2	1.7	65	1	SMA	78*24*10.2
QPS6-2000-18000-A-1	Absorptive	2~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-2000-18000-A-2	Absorptive	2~18	100	3.2	2	60	1	SMA	31.75*31.75*12
QPS6-2000-20000-A-1	Absorptive	2~20	120	4.5	2	60	1	SMA	78*24*10.2
QPS6-2000-20000-A-2	Absorptive	2~20	100	3.6	2	60	1	SMA	31.75*31.75*12
QPS6-3000-6000-A-1	Absorptive	3~6	120	2	1.5	65	1	SMA	78*24*10.2
QPS6-3000-6000-A-2	Absorptive	3~6	100	1.8	1.5	75	1	SMA	31.75*31.75*12
QPS6-4000-8000-A-1	Absorptive	4~8	120	2.5	1.5	65	1	SMA	78*24*10.2
QPS6-4000-8000-A-2	Absorptive	4~8	100	2.2	1.7	70	1	SMA	31.75*31.75*12
QPS6-5000-10000-A-1	Absorptive	5~10	120	2.8	1.7	65	1	SMA	78*24*10.2
QPS6-5000-10000-A-2	Absorptive	5~10	100	2.3	1.7	70	1	SMA	31.75*31.75*12
QPS6-6000-12000-A-1	Absorptive	6~12	120	3.2	1.7	65	1	SMA	78*24*10.2
QPS6-6000-12000-A-2	Absorptive	6~12	100	2.5	1.7	70	1	SMA	31.75*31.75*12
QPS6-6000-18000-A	Absorptive	6~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-8000-12000-A	Absorptive	8~12	100	2.5	1.7	70	1	SMA	31.75*31.75*12
QPS6-12000-18000-A-1	Absorptive	12~18	120	4.2	2	60	1	SMA	78*24*10.2
QPS6-12000-18000-A-2	Absorptive	12~18	100	3.2	2	60	1	SMA	31.75*31.75*12

SP8T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS8-100-18000-A	Absorptive	0.1~18	120	4.8	2	80	1	SMA	104*24*10.2
QPS8-100-20000-A	Absorptive	0.1~20	120	5	2	80	1	SMA	104*24*10.2
QPS8-400-8000-A	Absorptive	0.4~8	120	3.2	1.7	70	1	SMA	104*24*10.2
QPS8-400-12000-A	Absorptive	0.4~12	120	4	1.8	80	1	SMA	104*24*10.2
QPS8-500-18000-A	Absorptive	0.5~18	120	4.8	2	80	1	SMA	104*24*10.2
QPS8-500-18000-R	Reflective	0.5~18	100	4	1.5	60	1	SMA	104*24*10.2
QPS8-500-20000-A	Absorptive	0.5~20	120	5	2	80	1	SMA	104*24*10.2
QPS8-500-40000-A	Absorptive	0.5~40	50	10	3	45	0.2	2.92mm	37*37*12
QPS8-800-18000-R	Reflective	0.8~18	100	4	1.5	60	1	SMA	104*24*10.2
QPS8-1000-2000-A	Absorptive	1~2	120	1.7	1.8	80	1	SMA	104*24*10.2
QPS8-1000-8000-A	Absorptive	1~8	120	3	1.8	80	1	SMA	104*24*10.2
QPS8-1000-18000-A	Absorptive	1~18	120	2.5	1.8	80	1	SMA	104*24*10.2
QPS8-1000-20000-A	Absorptive	1~20	120	5	2	80	1	SMA	104*24*10.2
QPS8-2000-4000-A	Absorptive	2~4	120	2.5	1.8	80	1	SMA	104*24*10.2
QPS8-2000-6000-A	Absorptive	2~6	120	2.6	1.8	80	1	SMA	104*24*10.2
QPS8-2000-8000-A	Absorptive	2~8	120	3	1.5	80	1	SMA	104*24*10.2
QPS8-2000-18000-A	Absorptive	2~18	120	4.8	2	80	1	SMA	104*24*10.2
QPS8-2000-20000-A	Absorptive	2~20	120	5	2	80	1	SMA	104*24*10.2
QPS8-3000-6000-A	Absorptive	3~6	120	2.6	1.8	80	1	SMA	104*24*10.2
QPS8-4000-8000-A	Absorptive	4~8	120	3	1.8	80	1	SMA	104*24*10.2
QPS8-5000-10000-A	Absorptive	5~10	120	3.5	1.8	80	1	SMA	104*24*10.2
QPS8-6000-12000-A	Absorptive	6~12	120	4	1.8	80	1	SMA	104*24*10.2
QPS8-6000-18000-A	Absorptive	6~18	120	4.8	2	80	1	SMA	104*24*10.2
QPS8-10000-40000-A	Absorptive	10~40	50	8.5	2.8	45	0.2	2.92mm	37*37*12
QPS8-10000-40000-R	Reflective	10~40	50	9	2.5	45	0.2	2.92mm	37*37*12
QPS8-12000-18000-A	Absorptive	12~18	120	4.8	2	80	1	SMA	104*24*10.2

SP12T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS12-26000-40000-A	Absorptive	26~40	100	9	2.5	45	0.2	2.92mm	203.2*30*10.2

SP16T

The sizes in the following table do not include connectors.

Part Number	Switch Type	Frequency (GHz)	Switching Time (nS, max.)	Insertion Loss (dB, max.)	VSWR (max.)	Isolation (dB, min.)	Input Power (W)	Connector	Size* (mm)
QPS16-200-20000-A	Absorptive	0.2~20	150	7.5	2	80	1	SMA	203.2*30*10.2
QPS16-400-8000-A	Absorptive	0.4~8	150	4.2	1.7	80	1	SMA	203.2*30*10.2
QPS16-400-12000-A	Absorptive	0.4~12	150	5.2	1.8	80	1	SMA	203.2*30*10.2
QPS16-500-18000-A	Absorptive	0.5~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-500-20000-A	Absorptive	0.5~20	150	7.5	2	80	1	SMA	203.2*30*10.2
QPS16-500-26000-R	Reflective	0.5~26	200	9.5	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-500-40000-R	Reflective	0.5~40	200	12.5	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-800-18000-A	Absorptive	0.8~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-800-20000-A	Absorptive	0.8~20	150	7.5	2	80	1	SMA	203.2*30*10.2
QPS16-1000-2000-A	Absorptive	1~2	150	2.5	1.5	80	1	SMA	203.2*30*10.2
QPS16-1000-8000-A	Absorptive	1~8	150	4.2	1.7	80	1	SMA	203.2*30*10.2
QPS16-1000-18000-A	Absorptive	1~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-1000-20000-A	Absorptive	1~20	150	7.5	2	80	1	SMA	203.2*30*10.2
QPS16-1000-40000-R	Reflective	1~40	200	12.5	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-2000-4000-A	Absorptive	2~4	150	3.2	1.7	80	1	SMA	203.2*30*10.2
QPS16-2000-8000-A	Absorptive	2~8	150	4.2	1.7	80	1	SMA	203.2*30*10.2
QPS16-2000-12000-A	Absorptive	2~12	150	5.2	1.8	80	1	SMA	203.2*30*10.2
QPS16-2000-18000-A	Absorptive	2~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-2000-20000-A	Absorptive	2~20	150	7.5	2	80	1	SMA	203.2*30*10.2
QPS16-2000-40000-R	Reflective	2~40	200	12.5	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-3000-6000-A	Absorptive	3~6	150	3.7	1.7	80	1	SMA	203.2*30*10.2
QPS16-4000-8000-A	Absorptive	4~8	150	4.2	1.7	80	1	SMA	203.2*30*10.2
QPS16-5000-10000-A	Absorptive	5~10	150	4.7	1.8	80	1	SMA	203.2*30*10.2
QPS16-6000-12000-A	Absorptive	6~12	150	5.2	1.8	80	1	SMA	203.2*30*10.2
QPS16-6000-18000-A	Absorptive	6~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-8000-40000-R	Reflective	8~40	150	12	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-10000-40000-R	Reflective	10~40	100	15	2.5	65	0.2	2.92mm	203.2*30*10.2
QPS16-10000-40000-R-1	Reflective	10~40	150	12	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-12000-18000-A	Absorptive	12~18	150	7	2	80	1	SMA	203.2*30*10.2
QPS16-18000-40000-R	Reflective	18~40	150	12	2.5	60	0.2	2.92mm	203.2*30*10.2
QPS16-26500-40000-R	Reflective	26.5~40	150	12	2.5	60	0.2	2.92mm	203.2*30*10.2

Waveguide Switches

Waveguide switch is a common component in microwave electronic equipment. Its function is to select microwave channels on demand and achieve high-quality transmission of signals. Compared with other microwave switches, electromechanical microwave waveguide switches have the characteristics of low VSWR, low insertion loss and large power capacity, and have been widely used in radar, electronic countermeasure and other systems.

Qualwaves supplies waveguide switches work at 3.95~110GHz, the waveguide port covers WR-187 to WR-10.

How To Order Waveguide Switches:

QWSD-W-XYZ

- Waveguide Size
- Additional Options: TTL (T), Indicators (I), Extended Temperature (Z)
- Voltage (V): +15(F), +24(K)
- Interface: Circular Connector (2)

Examples: To order a waveguide switch, DPDT, WR-10, +24V, TTL control, indicator, specify QWSD-10-K2TI.

How To Order Waveguide Coaxial Switches:

QWCSD-V-W-XYZ

- Additional Options: TTL (T), Indicators (I), Extended Temperature (Z)
- Waveguide Interface
- Interface: Circular Connector (2)
- Coaxial Interface
- Voltage (V): +15(F), +24(K)

Examples: To order a waveguide coaxial switch, DPDT, WR42, SMA, +24V, TTL control, indicator, specify QWCSD-42-S-K2TI.

Waveguide Switches

Part Number	Switch Type	Interface	Frequency (GHz)	Switching Time (mS)	IL. (dB, max.)	ISO. (dB, min.)	VSWR (max.)	Voltage (V)	O. TEMP. (°C)	Extended TEMP. (°C)	NO. TEMP. (°C)
QWSD-10-X2Z	DPDT	WR-10	75~110	50	0.4	50	1.2	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-12-X2Z	DPDT	WR-12	60~90	50	0.4	50	1.2	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-15-X2Z	DPDT	WR-15	50~75	50	0.4	50	1.2	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-18-X2Z	DPDT	WR-18	40~60	50	0.2	50	1.15	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-22-X2Z	DPDT	WR-22	33~50	50	0.2	50	1.15	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-28-X2Z	DPDT	WR-28	26.3~40	50	0.15	55	1.1	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-34-X2Z	DPDT	WR-34	22~33	50	0.15	55	1.1	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-42-X2Z	DPDT	WR-42	18~26.5	50	0.1	60	1.1	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-51-X2Z	DPDT	WR-51	15~22	50	0.1	60	1.1	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-62-X2Z	DPDT	WR-62	12.4~18	50	0.1	60	1.1	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-75-X2Z	DPDT	WR-75	10~15	50	0.05	60	1.08	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-90-X2Z	DPDT	WR-90	8.2~12.4	50	0.05	60	1.08	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-112-X2Z	DPDT	WR-112	7.05~10	60	0.05	60	1.08	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-137-X2Z	DPDT	WR-137	5.85~8.2	60	0.02	60	1.05	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-159-X2Z	DPDT	WR-159	4.9~7.05	80	0.02	70	1.05	+15, +24	-40~+85	-55~+85	-55~+105
QWSD-187-X2Z	DPDT	WR-187	3.95~5.85	80	0.02	80	1.05	+15, +24	-40~+85	-55~+85	-55~+105

Waveguide Coaxial Switches

Part Number	Switch Type	Interface	Frequency (GHz)	Insertion Loss (dB)	Isolation (dB)	VSWR	Voltage (V)	O. TEMP. (°C)	Extended TEMP. (°C)	NO. TEMP. (°C)
QWCSD-42-S-X2Z	DPDT	SMA	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~11	0.30	60	1.30				
			11~15	0.35	50	1.35				
			15~18	0.50	50	1.50				
		WR-42	18~26.5	0.10	60	1.10				
QWCSD-51-S-X2Z	DPDT	SMA	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~11	0.30	60	1.30				
			11~15	0.35	50	1.35				
			15~18	0.50	50	1.50				
		WR-51	15~22	0.10	60	1.10				
QWCSD-62-S-X2Z	DPDT	SMA	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~11	0.30	60	1.30				
			11~15	0.35	50	1.35				
			15~18	0.50	50	1.50				
		WR-62	12.4~18	0.10	60	1.10				
QWCSD-75-S-X2Z	DPDT	SMA	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~11	0.30	60	1.30				
			11~15	0.35	50	1.35				
			15~18	0.50	50	1.50				
		WR-75	10~15	0.05	60	1.08				
QWCSD-90-S-X2Z	DPDT	SMA	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~11	0.30	60	1.30				
			11~15	0.35	50	1.35				
			15~18	0.50	50	1.50				
		WR-90	8.2~12.4	0.05	60	1.05				
QWCSD-112-N-X2Z	DPDT	N	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~8.5	0.30	60	1.30				
		WR-112	7.05~10	0.05	60	1.08				
QWCSD-137-N-X2Z	DPDT	N	DC~1	0.05	80	1.10	+15 +24	-40~+85	-55~+85	-55~+105
			1~2	0.10	70	1.15				
			2~6.5	0.25	60	1.25				
			6.5~8.5	0.30	60	1.30				
		WR-137	5.85~8.2	0.02	60	1.05				

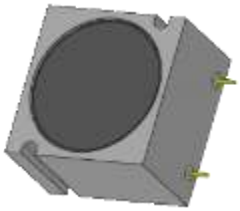
Surface Mount Relay Switches

How To Order:

QSSV-W-XYZ

- Switch Type
- Stop Frequency (GHz)
- Additional Options: Extended Temperature (Z)
- Voltage (V): +12(E), +18(H)
- Actuator Type: Failsafe (0), Latching (1)

Examples: To order a surface mount relay switch, SPDT, DC-2GHz, failsafe, +12V, specify QSS2-2-0E.



Part Number	Switch Type	Connector	Frequency (GHz)	Insertion Loss (dB)	Isolation (dB)	VSWR	Actuator Type	Voltage (V)
QSS2-W-XYZ	SPDT	PIN (Φ0.45mm)	DC~2	0.2	70	1.3	Failsafe Latching	+12 +18
			2~5	0.3	60	1.4		
			5~12	0.4	50	1.5		
			12~18	0.7	40	1.7		

Switch Matrixs

How To Order:

QSM-W-X-Y-Z

- Start Frequency (MHz)
- Stop Frequency (MHz)
- Number of Output Ports
- Number of Input Ports

Examples: To order a switch matrix, 30~3000MHz, 5*15, specify QSM-30-3000-5-15.

The sizes in the following table do not include connectors.

Part Number	Frequency (GHz)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Voltage (V)	Current (mA)	Description	Connector	Size* (mm)
QSM-9K-30-8-8	9K~30	9	45	2.5	5	150	8*8	2.92mm	240*45*24
QSM-30-3000-5-15	0.03~3	2	50	-	5	500	5*15	SMA	240*60*20

Terminations

The main function of the termination is to absorb all the microwave energy from the transmission line and improve the matching performance of the circuit. It is usually connected to the terminal of the circuit, so it is also called terminal load or matching load.

Qualwave supplies a series of terminations, including coaxial terminations，low power waveguide terminations, small size power waveguide terminations and high power waveguide terminations. The frequency range is up to 110GHz.

Coaxial Terminations (50Ω)

How To Order:

QCTX-Y-Z

Serial Number

Connector Type

Stop Frequency (MHz)

Examples: To order a coaxial termination, DC~110GHz, 1.0mm male, specify QCT11001-110-1.

Features:

- Low VSWR
- High Power
- Broadband

Applications:

- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

0.5W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
					Male	Female	
QCT33R5-33-3	DC~33	0.5	1.25	3.5mm	L: 12	L: 11.9	-55~+125
QCT40R5-40-K	DC~40		1.25	2.92mm	L: 12	L: 11.9	
QCT40R5-40-A			1.30	SSMA	L: 10.9	L: 9.9	
QCT40R5-40-P			1.40	SMP	Φ4.8*9.9	Φ4.8*9.4	
QCT40R5-40-G			1.50	SSMP	Φ4.8*10.8	Φ4.8*10	
QCT50R5-50-2	DC~50		1.40	2.4mm	L: 12.4	L: 13	
QCT67R5-67-V	DC~67		1.45	1.85mm	Φ9.3*16.1	Φ7*16.7	

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add “F” after the part number.

1W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
					Male	Female	
QCT1801-18-S	DC~18	1	1.25	SMA	Φ6.3*14.9	Φ6.3*13.8	-55~+125
QCT1801-18-A			1.25	SSMA	Φ6.3*16	-	-55~+85
QCT9001-90-5	DC~90		1.50	1.35mm	Φ8.8*15.1	-	-55~+125
QCT11001-110-1	DC~110		1.60	1.0mm	Φ7.5*13.7	Φ7.5*13.7	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add “F” after the part number.

At present, only SSMA male termination can be available, SSMA female termination cannot be available.

2W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
					Male	Female	
QCT0402-4-D	DC~4	2	1.25	SMB	Φ6.4*12.9	Φ6.4*14.9	-55~+125
QCT0402-4-M			1.25	MCX	-	Φ6.1*14.9	
QCT0602-6-M	DC~6		1.25	MCX	Φ6.1*15.4	-	
QCT1802-4-N	DC~4		1.20	N	Φ16.5*30	Φ16.5*28	
QCT1802-8-N	DC~8		1.25				
QCT1802-12.4-N	DC~12.4		1.30				
QCT1802-18-N	DC~18		1.20		L: 18	L: 23.6	
QCT1802-4-T	DC~4		1.20	TNC	Φ25*68	Φ12.7*24	
QCT1802-8-T	DC~8		1.25				
QCT1802-12.4-T	DC~12.4		1.35				
QCT1802-18-T	DC~18		1.40				
QCT1802-4-A	DC~4		1.15	SSMA	Φ9*22.5	Φ9*21	
QCT1802-8-A	DC~8		1.20				
QCT1802-12.4-A	DC~12.4		1.25				
QCT1802-18-A	DC~18		1.30				
QCT2602-4-S	DC~4		1.15	SMA	Φ9*20	Φ9*19	
QCT2602-8-S	DC~8		1.20				
QCT2602-12.4-S	DC~12.4		1.25				
QCT2602-18-S	DC~18		1.15		L: 12.3	L: 12.6	
QCT2602-26.5-S	DC~26.5		1.20				
QCT3302-33-3	DC~33		1.15	3.5mm	L: 12	L: 11.9	
QCT4002-40-K	DC~40		1.20	2.92mm	L: 12	L: 11.9	
QCT4002-40-A			1.30	SSMA	L: 10.9	L: 9.9	
QCT4002-40-P			1.40	SMP	Φ4.8*9.9	Φ4.8*9.4	
QCT4002-40-G			1.50	SSMP	Φ4.8*10.8	Φ4.8*10	
QCT5002-50-2	DC~50		1.25	2.4mm	L: 12.4	L: 13	
QCT6702-67-V	DC~67		1.30	1.85mm	Φ9*11.9	Φ6.4*13.6	

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

5W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size* (mm)		Temperature (°C)
								Male	Female	
QCT1805-4-N	DC~4	5	500	5	0.25	1.20	N	Φ16.5*36	-	-55~+125
QCT1805-8-N	DC~8					1.25				
QCT1805-12.4-N	DC~12.4					1.30				
QCT1805-18-N	DC~18					1.40				
QCT1805-4-S	DC~4		500	5	0.5	1.15	SMA	Φ19*20	-	-55~+125
QCT1805-8-S	DC~8					1.20				
QCT1805-12.4-S	DC~12.4					1.25				
QCT1805-18-S	DC~18					1.30				
QCT2605-26.5-S	DC~26.5		20	5	2.5	1.25	SMA	Φ15.8*28.4	Φ15.8*28.1	-55~+85
QCT2605-26.5-3	DC~26.5		500	5	0.5	1.20	3.5mm	Φ15.7*26.3	Φ15.7*25.5	
QCT4005-40-K	DC~40		20	5	2.5	1.25	2.92mm	Φ15.8*29.6	Φ15.8*27.8	-55~+125
QCT5005-50-2	DC~50		20	5	2.5	1.30	2.4mm	Φ31.8*17.8	Φ31.8*17.8	-55~+125
QCT6705-67-V	DC~67		20	5	2.5	1.35	1.85mm	Φ31.8*17.8	Φ31.8*17.8	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.
The sizes of QCT5005 & QCT6705 Series is exclude connector.

7W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
					Male	Female	
QCT1807-18-P	DC~18	7	1.50	SMP	15.4*14.5*7	-	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

10W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT1810-4-N	DC~4	10	1000	5	0.5	1.20	N	Φ30*69.5	Φ30*64.5	-55~+125
QCT1810-8-N	DC~8					1.25				
QCT1810-12.4-N	DC~12.4					1.35				
QCT1810-18-N	DC~18					1.40				
QCT1810-4-T	DC~4		-	-	-	1.15	TNC	Φ30*33.5	-	-55~+125
QCT1810-8-T	DC~8					1.25				
QCT1810-12.4-T	DC~12.4					1.35				
QCT1810-18-T	DC~18					1.40				
QCT1810-4-S	DC~4		500	5	1	1.20	SMA	Φ15.8*39.5	-	-55~+125
QCT1810-8-S	DC~8					1.25				
QCT1810-12.4-S	DC~12.4					1.35				
QCT1810-18-S	DC~18					1.40				
QCT1810-4-P	DC~4		-	-	-	1.20	SMP	Φ14.5*15.4	-	-55~+125
QCT1810-8-P	DC~8					1.25				
QCT1810-12.4-P	DC~12.4					1.35				
QCT1810-18-P	DC~18					1.50				
QCT2610-26.5-S	DC~26.5		100	5	5	1.25	SMA	Φ31.8*28.4	Φ31.8*28.1	-55~+85
QCT2610-26.5-3	DC~26.5		1000	5	0.5	1.25	3.5mm	Φ16.5*41	Φ16.5*40.2	
QCT4010-40-K	DC~40		100	5	5	1.25	2.92mm	Φ31.8*29.6	Φ31.8*27.8	-55~+125
QCT5010-50-2	DC~50		100	5	5	1.40	2.4mm	Φ40*47.7	-	-55~+125
QCT6710-67-V	DC~67		100	5	5	1.40	1.85mm	Φ40*47.7	-	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

20W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT1820-4-N	DC~4	20	5000	5	1	1.20	N	-	-	-55~+125
QCT1820-8-N	DC~8					1.25				
QCT1820-12.4-N	DC~12.4					1.35				
QCT1820-18-N	DC~18		1000	5	1	1.40				
QCT1820-4-S	DC~4		500	5	2	1.20	SMA	Φ38*39.5	-	
QCT1820-8-S	DC~8					1.25				
QCT1820-12.4-S	DC~12.4					1.35				
QCT1820-18-S	DC~18					1.40				
QCT2620-26.5-S	DC~26.5		200	5	10	1.30	SMA	Φ44*44.4	Φ44*44.1	
QCT4020-40-K	DC~40		200	5	10	1.30	2.92mm	Φ44*45.6	Φ44*43.8	

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

25W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT1825-4-N	DC~4	25	5000	5	1.25	1.20	N	Φ44*74	-	-55~+125
QCT1825-8-N	DC~8					1.25				
QCT1825-12.4-N	DC~12.4					1.35				
QCT1825-18-N	DC~18		1000	5	1.25	1.40				
QCT1825-4-S	DC~4		500	5	2.5	1.15	SMA	Φ38*51.5	-	
QCT1825-8-S	DC~8					1.20				
QCT1825-12.4-S	DC~12.4					1.25				
QCT1825-18-S	DC~18					1.30				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

30W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT2630-26.5-S	DC~26.5	30	200	5	10	1.30	SMA	Φ54*52.4	Φ54*52.1	-55~+125
QCT4030-40-K	DC~40		200	5	10	1.30	2.92mm	Φ54*53.6	Φ54*51.8	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

50W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT1850-4-B	DC~4	50	500	5	5	1.20	BNC	Φ64*89	-	-55~+125
QCT1850-6-B	DC~6					1.25				
QCT1850-4-N	DC~4		5000	5	0.5	1.20	N	Φ64*90	Φ64*85	-55~+125
QCT1850-8-N	DC~8					1.25				
QCT1850-12.4-N	DC~12.4					1.35				
QCT1850-18-N	DC~18		1000	5	2.5	1.40				
QCT1850-4-T	DC~4		5000	5	0.5	1.20	TNC	Φ64*88.5	Φ64*84.5	-55~+125
QCT1850-8-T	DC~8					1.25				
QCT1850-12.4-T	DC~12.4					1.35				
QCT1850-18-T	DC~18		1000	5	2.5	1.40				
QCT1850-4-S	DC~4		500	5	5	1.15	SMA	Φ38*81.5	Φ64*89.5	-55~+125
QCT1850-8-S	DC~8					1.20				
QCT1850-12.4-S	DC~12.4					1.25				
QCT1850-18-S	DC~18					1.30				
QCT2650-26.5-S	DC~26.5		200	5	10	1.30	SMA	Φ54*99.4	Φ54*99.1	-55~+85
QCT2650-26.5-3	DC~26.5		1000	5	2.5	1.25	3.5mm	Φ63*63.5	Φ63*62.7	
QCT4050-40-K	DC~40		200	5	10	1.35	2.92mm	Φ54*100.6	Φ54*98.8	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

100W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K1-4-N	DC~4	100	5000	5	1	1.15	N	Φ64*141	Φ64*136	-55~+125
QCT18K1-8-N	DC~8					1.20				
QCT18K1-12.4-N	DC~12.4					1.25				
QCT18K1-18-N	DC~18		1000	5	5	1.35				
QCT18K1-4-S	DC~4		1000	5	7.5	1.15	SMA	Φ64*141	Φ64*140.5	-55~+125
QCT18K1-8-S	DC~8					1.20				
QCT18K1-12.4-S	DC~12.4					1.25				
QCT18K1-18-S	DC~18		500	5	10	1.35				
QCT26K1-26.5-S	DC~26.5		500	5	10	1.40	SMA	Φ63*119.2	-	-55~+85
QCT40K1-40-K	DC~40		200	5	10	1.40	2.92mm	181*160*90	-	-55~+125

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

150W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K15-4-N	DC~4	150	5000	5	1.5	1.20	N	192*120*110	-	-55~+125
QCT18K15-8-N	DC~8					1.25				
QCT18K15-12.4-N	DC~12.4					1.35				
QCT18K15-18-N	DC~18		1000	5	7.5	1.45				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

200W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K2-4-N	DC~4	200	5000	5	2	1.20	N	243*120*110	-	-55~+125
QCT18K2-8-N	DC~8					1.25				
QCT18K2-12.4-N	DC~12.4					1.35				
QCT18K2-18-N	DC~18		1000	5	10	1.40				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

250W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K25-4-N	DC~4	250	5000	5	2.5	1.20	N	294*120*110	-	-55~+125
QCT18K25-8-N	DC~8					1.25				
QCT18K25-12.4-N	DC~12.4					1.35				
QCT18K25-18-N	DC~18		1000	5	12.5	1.45				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

300W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K3-4-N	DC~4	300	5000	5	3	1.20	N	345*120*110	340*120*110	-55~+125
QCT18K3-8-N	DC~8					1.25				
QCT18K3-12.4-N	DC~12.4					1.35				
QCT18K3-18-N	DC~18		1000	5	15	1.45				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

400W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K4-4-N	DC~4	400	5000	5	4	1.20	N	447*120*110	-	-55~+125
QCT18K4-8-N	DC~8					1.25				
QCT18K4-12.4-N	DC~12.4					1.35				
QCT18K4-18-N	DC~18		1000	5	20	1.45				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

500W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K5-4-N	DC~4	500	5000	5	5	1.20	N	549*120*110	-	-55~+125
QCT18K5-8-N	DC~8					1.25				
QCT18K5-12.4-N	DC~12.4					1.35				
QCT18K5-18-N	DC~18		1000	5	25	1.60				
QCT18K5-4-7	DC~4		-	-	-	1.2	7/16 DIN	553*120*110	-	
QCT18K5-6-7	DC~6					1.25				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

600W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT18K6-4-N	DC~4	600	5000	5	6	1.20	N	549*120*110	544*120*110	-55~+125
QCT18K6-8-N	DC~8					1.25				
QCT18K6-12.4-N	DC~12.4					1.35				
QCT18K6-18-N	DC~18		1000	5	30	1.45				

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

1000W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	With Roller	Size (mm)		Temperature (°C)
									Male	Female	
QCT081K-2-N-A	DC~2	1000	5000	5	10	1.20	N	No	-	800*130*130	-55~+125
QCT081K-4-N-A	DC~4					1.20					
QCT081K-6-N-A	DC~6					1.30					
QCT081K-8-N-A	DC~8					1.55					
QCT081K-2-N-B	DC~2		5000	5	10	1.20	N	Yes	-	806*392*128	
QCT081K-4-N-B	DC~4					1.20					
QCT081K-6-N-B	DC~6					1.30					
QCT081K-8-N-B	DC~8					1.55					

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

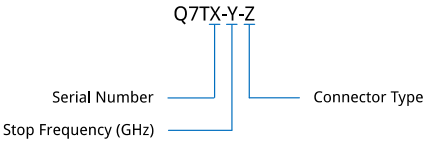
2000W

Part Number*	Frequency (GHz)	Average Power (W@25°C)	Peak Power (W)	Pulse Width (uS)	Duty Cycle (%)	VSWR (max.)	Connector	Size (mm)		Temperature (°C)
								Male	Female	
QCT042K-4-N	DC~4	2000	10000	5	10	1.75	N	-	627*410*170	-55~+125
QCT042K-4-7						1.75	7/16 DIN	-	-	

The part number in the above table is the default part number, and the connector type is male. If you need female termination, please add "F" after the part number.

Coaxial Terminations (75Ω)

How To Order:



Features:
- Low VSWR
- Broadband

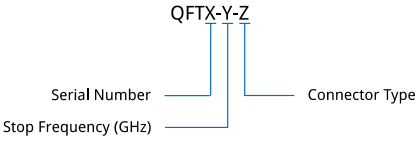
Applications:
- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

Examples: To order a coaxial termination, 1W, DC~1GHz, 75Ω, F male, specify Q7T0301-1-F.

Part Number	Frequency (GHz)	Average Power (W@25°C)	VSWR	Connector	Temperature (°C)
Q7T0301-1-F	DC~1	1	1.1	F (m)	-55~+125
Q7T0301-1-B	DC~1	1	1.1	BNC (m)	-55~+125
Q7T0301-2-F	DC~2	1	1.15	F (m)	-55~+125
Q7T0301-2-B	DC~2	1	1.15	BNC (m)	-55~+125
Q7T0301-3-F	DC~3	1	1.2	F (m)	-55~+125
Q7T0301-3-B	DC~3	1	1.2	BNC (m)	-55~+125
Q7T0302-1-F	DC~1	2	1.1	F (m)	-55~+125
Q7T0302-1-B	DC~1	2	1.1	BNC (m)	-55~+125
Q7T0302-1-N	DC~1	2	1.1	N (m)	-55~+125
Q7T0302-2-F	DC~2	2	1.15	F (m)	-55~+125
Q7T0302-2-B	DC~2	2	1.15	BNC (m)	-55~+125
Q7T0302-2-N	DC~2	2	1.15	N (m)	-55~+125
Q7T0302-3-F	DC~3	2	1.2	F (m)	-55~+125
Q7T0302-3-B	DC~3	2	1.2	BNC (m)	-55~+125
Q7T0302-3-N	DC~3	2	1.2	N (m)	-55~+125
Q7T0305-3-F	DC~1	5	1.1	F (m)	-55~+125
Q7T0305-3-B	DC~1	5	1.1	BNC (m)	-55~+125
Q7T0305-3-N	DC~1	5	1.1	N (m)	-55~+125
Q7T0305-2-F	DC~2	5	1.15	F (m)	-55~+125
Q7T0305-2-B	DC~2	5	1.15	BNC (m)	-55~+125
Q7T0305-2-N	DC~2	5	1.15	N (m)	-55~+125
Q7T0305-3-F	DC~3	5	1.2	F (m)	-55~+125
Q7T0305-3-B	DC~3	5	1.2	BNC (m)	-55~+125
Q7T0305-3-N	DC~3	5	1.2	N (m)	-55~+125

Feed-Thru Terminations

How To Order:



Features:

※ High Power

Applications:

※ Instrument

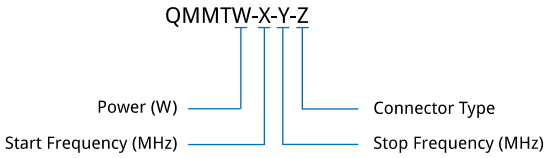
Examples: To order a feed-thru termination, DC~2GHz, 5W, N male to N female, specify QFT0205-2-NNF.

Part Number	Frequency (GHz)	Power (W)	Impedance (Ω)	Weight (g)	Connector	Size (mm)	Temperature (°C)
QFT0205-2-NNF	DC~2	5	50	65	N (m)-N (f)	Φ20*70	-10~+50
QFT0205-2-BBF	DC~2	5	50	65	BNC (m)-BNC (f)	Φ20*70	-10~+50
QFT0205-2-TTF	DC~2	5	50	65	TNC (m)-TNC (f)	Φ20*70	-10~+50
QFT0210-2-NNF	DC~2	10	50	120	N (m)-N (f)	Φ38*80	-10~+50
QFT0210-2-BBF	DC~2	10	50	120	BNC (m)-BNC (f)	Φ38*80	-10~+50
QFT0210-2-TTF	DC~2	10	50	120	TNC (m)-TNC (f)	Φ38*80	-10~+50
QFT0225-2-NNF	DC~2	25	50	350	N (m)-N (f)	Φ44*116	-10~+50
QFT0225-2-BBF	DC~2	25	50	350	BNC (m)-BNC (f)	Φ44*116	-10~+50
QFT0225-2-TTF	DC~2	25	50	350	TNC (m)-TNC (f)	Φ44*116	-10~+50
QFT0250-2-NNF	DC~2	50	50	250	N (m)-N (f)	130*60*60	-10~+50
QFT0250-2-BBF	DC~2	50	50	250	BNC (m)-BNC (f)	130*60*60	-10~+50
QFT0250-2-TTF	DC~2	50	50	250	TNC (m)-TNC (f)	130*60*60	-10~+50
QFT02K1-2-NNF	DC~2	100	50	380	N (m)-N (f)	230*80*60	-10~+50
QFT02K1-2-BBF	DC~2	100	50	380	BNC (m)-BNC (f)	230*80*60	-10~+50
QFT02K1-2-TTF	DC~2	100	50	380	TNC (m)-TNC (f)	230*80*60	-10~+50

Mismatch Terminations

Manually Variable Mismatch Terminations

How To Order:



Examples: To order a manually variable mismatch termination, 100W, 850~960MHz, N female, specify QMMTK1-850-960-NF.

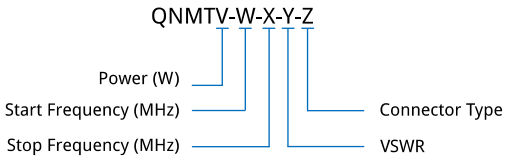
Features:
- High Power
- Narrow Band

Applications:
- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

Part Number	Frequency (GHz)	Power (W)	VSWR (max.)	Calibrate Frequency (MHz)	Weight (Kg)	Connector	Size (mm)	Temperature (°C)
QMMTK1-850-960-NF	0.85~0.96	100	1.2~5 (Variable)	905	1.6	N (f)	173*102*75	-40~+65
QMMTK1-1920-2170-NF	1.92~2.17	100	1.2~5 (Variable)	2045	1.6	N (f)	173*102*75	-40~+65

Narrow Band Mismatch Terminations

How To Order:



Examples: To order a narrow band mismatch termination, 50W, 7600~8400MHz, VSWR 4, SMA female, specify QMT50-7600-8400-4-SF.

Features:
- Low VSWR
- Narrow Band

Applications:
- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

Part Number	Frequency (GHz)	Average Power (W@25°C)	VSWR	Connector	Temperature (°C)
QNMT02-W-X-Y-Z	F0±5% (F0: 5 max.)	2	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N, SMA, BNC, TNC	-55~+125
QNMT50-W-X-Y-Z	F0±5% (F0: 5 max.)	50	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N, SMA, BNC, TNC	-55~+125
QNMTK1-W-X-Y-Z	F0±5% (F0: 5 max.)	100	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N, SMA, BNC, TNC	-55~+125
QNMTK15-W-X-Y-N	F0±5% (F0: 5 max.)	150	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N	-55~+125
QNMTK2-W-X-Y-N	F0±5% (F0: 5 max.)	200	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N	-55~+125
QNMTK25-W-X-Y-N	F0±5% (F0: 4 max.)	250	1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5	N	-55~+125
QNMTK3-W-X-Y-N-A(B)	F0±5% (F0: 4 max.)	300	1.5, 2, 2.5, 3, 3.5, 4	N	-55~+125
QNMTK4-W-X-Y-N-A(B)	F0±5% (F0: 4 max.)	400	1.5, 2, 2.5, 3, 3.5, 4	N	-55~+125
QNMTK5-W-X-Y-N	F0±5% (F0: 4 max.)	500	1.5, 2, 2.5, 3, 3.5, 4	N	-55~+125
QNMTK8-W-X-Y-Z	F0±5% (F0: 4 max.)	800	1.5, 2, 2.5, 3, 3.5, 4	N, 7/16, IF45	-55~+125
QNMT1K-W-X-Y-Z	F0±5% (F0: 2 max.)	1000	1.5, 2, 2.5, 3, 3.5, 4	N, 7/16, IF45	-55~+125

QNMTK3 & QNMTK4 Series, Size A: 305*98*60mm, Size B: 330*130*140mm.

Broadband Mismatch Terminations

How To Order:

QBMTV-W-X-Y-Z

- Power (W)
- Start Frequency (MHz)
- Stop Frequency (MHz)
- Connector Type
- VSWR

Examples: To order a broadband band mismatch termination, 50W, DC~8000MHz, VSWR 3, N male, specify QBMT50-0-8000-3-N.

Features:

- Low VSWR
- Broadband

Applications:

- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

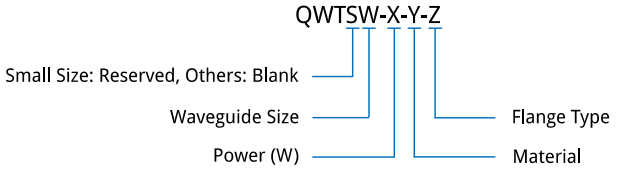
Part Number	Frequency (GHz)	Average Power (W@25°C)	VSWR	Connector	Temperature (°C)
QBMT50-0-8000-3-N	DC~8	50	3±0.3	N	-55~+125
QBMT50-30-500-Y-Z-A(B)	0.03~0.5	50	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMT50-500-800-Y-Z-A(B)	0.5~0.8	50	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMT50-800-2200-Y-Z-A(B)	0.8~2.2	50	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMTK1-30-500-Y-Z-A(B)	0.03~0.5	100	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMTK1-500-800-Y-Z-A(B)	0.5~0.8	100	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMTK1-800-2200-Y-Z-A(B)	0.8~2.2	100	1~6 (±7%)	N, SMA, 7/16	-55~+125
QBMTK15-30-500-Y-Z-A(B)	0.03~0.5	150	1~6 (±7%)	N, SMA	-55~+125
QBMTK15-500-800-Y-Z-A(B)	0.5~0.8	150	1~6 (±7%)	N, SMA	-55~+125
QBMTK15-800-2200-Y-Z-A(B)	0.8~2.2	150	1~6 (±7%)	N, SMA	-55~+125
QBMTK2-30-500-Y-Z	0.03~0.5	200	1~6 (±7%)	N, SMA	-55~+125
QBMTK2-500-800-Y-Z	0.5~0.8	200	1~6 (±7%)	N, SMA	-55~+125
QBMTK2-800-2200-Y-Z	0.8~2.2	200	1~6 (±7%)	N, SMA	-55~+125
QBMTK25-30-500-Y-Z	0.03~0.5	250	1~6 (±7%)	N, SMA	-55~+125
QBMTK25-500-800-Y-Z	0.5~0.8	250	1~6 (±7%)	N, SMA	-55~+125
QBMTK25-800-2200-Y-Z	0.8~2.2	250	1~6 (±7%)	N, SMA	-55~+125
QBMTK3-30-500-Y-Z	0.03~0.5	300	1~6 (±7%)	N, SMA	-55~+125
QBMTK3-500-800-Y-Z	0.5~0.8	300	1~6 (±7%)	N, SMA	-55~+125
QBMTK3-800-2200-Y-Z	0.8~2.2	300	1~6 (±7%)	N, SMA	-55~+125
QBMT25-600-3900-2.5-SF	0.6~3.9	25	2.5±0.2	SMA	-55~+125
QBMT30-600-3900-3-S	0.6~3.9	30	3±0.5	SMA	-55~+125
QBMTK2-9000-10000-Y-NF	9~10	200	1.5±0.3, 1.8±0.4, 2.0±0.4, 2.5±0.3, 3.0±0.5	N	-55~+125

QBMT50 Series, Size A: Φ38*95mm, Size B: 90*130*75mm. QBMTK1 Series, Size A: 153*76*76mm, Size B: 155*130*75mm.

QBMTK15 Series, Size A: 153*76*76mm, Size B: 155*130*75mm.

Waveguide Terminations

How To Order:



Examples: To order a high power waveguide termination, WR-19, 1.5KW, aluminium, FUGP500, Specify QWT19-1K5-A-10.

Features:

- Low VSWR

Applications:

- Transmitters
- Antennas
- Laboratory Test
- Impedance Matching

Low Power Waveguide Terminations

Part Number	Frequency (GHz)	Power (W)	VSWR (max.)	Material	Waveguide Size	Flange	Temperature (°C)
QWT12-R5-B-6	60.5~91.9	0.5	1.15	Brass	WR-12 (BJ740)	FUGP740	-55~+125
QWT15-5-B-6	49.8~75.8	5	1.08	Brass	WR-15 (BJ620)	FUGP620	-55~+125
QWT19-5-B-10	39.2~59.6	5	1.05	Brass	WR-19 (BJ500)	FUGP500	-55~+125
QWT22-5-B-5	32.9~50.1	5	1.05	Brass	WR-22 (BJ400)	FUGP400	-55~+125
QWT22-10-B-5	32.9~50.1	10	1.2	Brass	WR-22 (BJ400)	FUGP400	-55~+125
QWT28-15-A-1	26.3~40	15	1.03	Aluminium	WR-28 (BJ320)	FBP320	-55~+125
QWT34-15-A-1	21.7~33	15	1.03	Aluminium	WR-34 (BJ260)	FBP260	-55~+125
QWT42-15-A-1	17.6~26.7	15	1.03	Aluminium	WR-42 (BJ220)	FBP220	-55~+125
QWT51-30-A-1	14.5~22	30	1.03	Aluminium	WR-51 (BJ180)	FBP180	-55~+125
QWT62-30-A-1	11.9~18	30	1.03	Aluminium	WR-62 (BJ140)	FBP140	-55~+125
QWT75-30-A-1	9.84~15	30	1.03	Aluminium	WR-75 (BJ120)	FBP120	-55~+125
QWT90-50-A-1	8.2~12.5	50	1.03	Aluminium	WR-90 (BJ100)	FBP100	-55~+125
QWT112-50-A-2	6.57~10	50	1.03	Aluminium	WR-112 (BJ84)	FDP84	-55~+125
QWT137-50-A-2	5.38~8.17	50	1.03	Aluminium	WR-137 (BJ70)	FDP70	-55~+125
QWT159-60-A-2	4.64~7.05	60	1.03	Aluminium	WR-159 (BJ58)	FDP58	-55~+125
QWT187-60-A-2	3.94~5.99	60	1.03	Aluminium	WR-187 (BJ48)	FDP48	-55~+125
QWT229-60-A-2	3.22~4.9	60	1.03	Aluminium	WR-229 (BJ40)	FDP40	-55~+125
QWT284-K1-A-2	2.6~3.95	100	1.03	Aluminium	WR-284 (BJ32)	FDP32	-55~+125
QWT340-K1-A-2	2.17~3.3	100	1.03	Aluminium	WR-340 (BJ26)	FDP26	-55~+125
QWT430-K1-A-2	1.72~2.61	100	1.03	Aluminium	WR-430 (BJ22)	FDP22	-55~+125
QWT510-K15-A-2	1.45~2.22	150	1.03	Aluminium	WR-510 (BJ18)	FDP18	-55~+125
QWT650-K15-A-2	1.13~1.73	150	1.03	Aluminium	WR-650 (BJ14)	FDP14	-55~+125

Medium Power Waveguide Terminations

Part Number	Frequency (GHz)	Power (W)	VSWR (max.)	Material	Waveguide Size	Flange	Temperature (°C)
QWT15-50-B-6	49.8~75.8	50	1.2	Brass	WR-15 (BJ620)	FUGP620	-55~+125
QWT19-50-B-10	39.2~59.6	50	1.2	Brass	WR-19 (BJ500)	FUGP500	-55~+125
QWT22-50-B-5	32.9~50.1	50	1.2	Brass	WR-22 (BJ400)	FUGP400	-55~+125
QWT28-50-A-3	26.3~40	50	1.2	Aluminium	WR-28 (BJ320)	FBM320	-
QWT28-K1-A-1	26.3~40	100	1.2	Aluminium	WR-28 (BJ320)	FBP320	-55~+125
QWT34-K1-A-1	21.7~33	100	1.2	Aluminium	WR-34 (BJ260)	FBP260	-55~+125
QWT42-K1-A-1	17.6~26.7	100	1.2	Aluminium	WR-42 (BJ220)	FBP220	-55~+125
QWT51-K1-A-1	14.5~22	100	1.2	Aluminium	WR-51 (BJ180)	FBP180	-55~+125
QWT62-K1-A-1	11.9~18	100	1.2	Aluminium	WR-62 (BJ140)	FBP140	-55~+125
QWT75-K1-A-1	9.84~15	100	1.2	Aluminium	WR-75 (BJ120)	FBP120	-55~+125
QWT90-K1-A-1	8.2~12.5	100	1.2	Aluminium	WR-90 (BJ100)	FBP100	-55~+125
QWT112-K15-A-1	6.57~10	150	1.2	Aluminium	WR-112 (BJ84)	FBP84	-55~+125
QWT137-K3-A-2	5.38~8.17	300	1.2	Aluminium	WR-137 (BJ70)	FDP70	-55~+125
QWT159-K3-A-2	4.64~7.05	300	1.2	Aluminium	WR-159 (BJ58)	FDP58	-55~+125
QWT187-K3-A-2	3.94~5.99	300	1.2	Aluminium	WR-187 (BJ48)	FDP48	-55~+125
QWT229-K3-A-2	3.22~4.9	300	1.2	Aluminium	WR-229 (BJ40)	FDP40	-55~+125
QWT284-K5-A-2	2.6~3.95	500	1.2	Aluminium	WR-284 (BJ32)	FDP32	-55~+125
QWT340-K5-A-2	2.17~3.3	500	1.2	Aluminium	WR-340 (BJ26)	FDP26	-55~+125
QWT430-K5-A-2	1.72~2.61	500	1.2	Aluminium	WR-430 (BJ22)	FDP22	-55~+125
QWT19-K6-A-10	39.2~59.6	600	1.2	Aluminium	WR-19 (BJ500)	FUGP500	-

Small Size Waveguide Terminations

Part Number	Frequency (GHz)	Power (W)	VSWR (max.)	Material	Waveguide Size	Flange	Temperature (°C)
QWTS28-15-A-1	26.3~40	15	1.2	Aluminium	WR-28 (BJ320)	FBP320	-55~+125
QWTS34-15-A-11	21.7~33	15	1.2	Aluminium	WR-34 (BJ260)	UG COVER	-55~+125
QWTS42-15-A-1	17.6~26.7	15	1.2	Aluminium	WR-42 (BJ220)	FBP220	-55~+125
QWTS51-20-A-11	14.5~22	20	1.2	Aluminium	WR-51 (BJ180)	UG COVER	-55~+125
QWTS62-20-A-1	11.9~18	20	1.2	Aluminium	WR-62 (BJ140)	FBP140	-55~+125
QWTS75-20-A-1	9.84~15	20	1.2	Aluminium	WR-75 (BJ120)	FBP120	-55~+125
QWTS90-20-A-1	8.2~12.5	20	1.2	Aluminium	WR-90 (BJ100)	FBP100	-55~+125
QWTS112-30-A-1	6.57~10	30	1.2	Aluminium	WR-112 (BJ84)	FBP84	-55~+125
QWTS137-30-A-2	5.38~8.17	30	1.2	Aluminium	WR-137 (BJ70)	FDP70	-55~+125

High Power Waveguide Terminations

Part Number	Frequency (GHz)	Power (W)	VSWR (max.)	Material	Waveguide Size	Flange	Temperature (°C)
QWT19-1K5-A-10	39.2~59.6	1500	1.2	Aluminium	WR-19 (BJ500)	FUGP500	-55~+125
QWT22-1K5-A-5	32.9~50.1	1500	1.2	Aluminium	WR-22 (BJ400)	FUGP400	-55~+125
QWT28-2K5-A-1	26.3~40	2500	1.15	Aluminium	WR-28 (BJ320)	FBP320	-55~+125
QWT28-1K-A-1	26.3~40	1000	1.2	Aluminium	WR-28 (BJ320)	FBP320	-
QWT34-2K5-A-1	21.7~33	2500	1.15	Aluminium	WR-34 (BJ260)	FBP260	-55~+125
QWT42-2K5-A-1	17.6~26.7	2500	1.15	Aluminium	WR-42 (BJ220)	FBP220	-55~+125
QWT51-2K5-A-1	14.5~22	2500	1.2	Aluminium	WR-51 (BJ180)	FBP180	-55~+125
QWT62-2K5-A-1	11.9~18	2500	1.15	Aluminium	WR-62 (BJ140)	FBP140	-55~+125
QWT75-2K5-A-1	9.84~15	2500	1.2	Aluminium	WR-75 (BJ120)	FBP120	-55~+125
QWT75-2K5-A-2	9.84~15	2500	1.2	Aluminium	WR-75 (BJ120)	FDP120	-55~+125
QWT90-2K5-A-1	8.2~12.5	2500	1.2	Aluminium	WR-90 (BJ100)	FBP100	-55~+125
QWT90-2K5-A-2	8.2~12.5	2500	1.2	Aluminium	WR-90 (BJ100)	FDP100	-55~+125
QWT112-2K5-A-1	6.57~10	2500	1.2	Aluminium	WR-112 (BJ84)	FBP84	-55~+125
QWT112-2K5-A-2	6.57~10	2500	1.2	Aluminium	WR-112 (BJ84)	FDP84	-55~+125
QWT137-2K5-A-1	5.38~8.17	2500	1.2	Aluminium	WR-137 (BJ70)	FBP70	-55~+125
QWT137-2K5-A-2	5.38~8.17	2500	1.2	Aluminium	WR-137 (BJ70)	FDP70	-55~+125
QWT159-2K5-A-1	4.64~7.05	2500	1.2	Aluminium	WR-159 (BJ58)	FBP58	-55~+125
QWT159-2K5-A-2	4.64~7.05	2500	1.2	Aluminium	WR-159 (BJ58)	FDP58	-55~+125
QWT187-2K5-A-1	3.94~5.99	2500	1.2	Aluminium	WR-187 (BJ48)	FBP48	-55~+125
QWT187-2K5-A-2	3.94~5.99	2500	1.2	Aluminium	WR-187 (BJ48)	FDP48	-55~+125
QWT229-2K5-A-1	3.22~4.9	2500	1.2	Aluminium	WR-229 (BJ40)	FBP40	-55~+125
QWT229-2K5-A-2	3.22~4.9	2500	1.2	Aluminium	WR-229 (BJ40)	FDP40	-55~+125
QWT284-2K5-A-2	2.6~3.95	2500	1.2	Aluminium	WR-284 (BJ32)	FDP32	-55~+125
QWT430-1K-A-2	2.17~3.3	1000	1.25	Aluminium	WR-430 (BJ22)	FDP22	0~+30

Tools

Qualwave can provide torque wrenches of different connectors.

Features: Easy to Use; **Applications:** Laboratory Tools.

Wrenches

Part Number	Connector	Torque (n.m)	Opening Size (mm)	Diameter (Φ mm)	Length (mm)
QW-71	7/16DIN	4.1	32	18.5	240
QW-L1	L27	4.1	27	18.5	240
QW-41	4.3-10	4.1	22	18.5	240
QW-T1	TNC	1.35	14.1	14.5	172
QW-T2	TNC	0.9	15	14.5	172
QW-N1	N	1.35	19.1	14.5	180
QW-N2	N	1.36	21	14.5	180
QW-N3	N	1.35	20.1	14.5	180
QW-S1	SMA, 3.5mm, 2.92mm, 2.4mm, 1.85mm	0.9	8.1	14.5	167
QW-A1	SSMA	0.5	6.5	14.5	167
QW-11	1.0mm	0.5	6	14.5	169

Waveguide To Coax Adapters

In the field of radio frequency and microwave, most of the signal transmission needs transmission lines for signal transmission, and coaxial lines and waveguides are widely used to transmit microwave and radio frequency energy. The two types of transmission lines differ greatly in size, materials and transmission characteristics. In order to interconnect the two transmission lines, a waveguide to coax adapter is needed.

Qualwave provides 0.64~110GHz high performance waveguide to coax adapters, and the interface covers WR-10 to WR-1150.

Features: Low VSWR; **Applications:** Wireless, Transmitters, Radar, Laboratory Test.

How To Order:

QWCA-W-X-Y-Z

Waveguide Size — W
Connector Type — X
Flange Type — Y
Configuration Type — Z

Examples: To order a waveguide to coax adapter, WR-10 to 1.0mm female, end launch, UG-387/U, specify QWCA-10-1F-E-7.

Waveguide To Coax Adapters

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Coax Connectors	Waveguide Size	Flange	Configuration
QWCA-10-1-E-12	73.8~112	1.35	0.5	1.0mm (m)	WR-10	UG-387/UM	End Launch
QWCA-10-1F-E-12	73.8~112	1.35	0.5	1.0mm (f)	WR-10	UG-387/UM	End Launch
QWCA-10-1-R-12	73.8~112	1.6	1.15	1.0mm (m)	WR-10	UG-387/UM	Right Angle
QWCA-10-1F-R-12	73.8~112	1.6	1.15	1.0mm (f)	WR-10	UG-387/UM	Right Angle
QWCA-10-M1-E-7	75~110	1.35	0.5	NMD1.0mm (m)	WR-10	UG-387/U	End Launch
QWCA-10-M1F-E-7	75~110	1.35	0.5	NMD1.0mm (f)	WR-10	UG-387/U	End Launch
QWCA-12-1-E-7	60.5~91.9	1.35	1.1	1.0mm (m)	WR-12	UG-387/U	End Launch
QWCA-12-1F-E-7	60.5~91.9	1.35	0.5	1.0mm (f)	WR-12	UG-387/U	End Launch
QWCA-12-1-R-7	60.5~91.9	1.6	1.15	1.0mm (m)	WR-12	UG-387/U	Right Angle
QWCA-12-1F-R-7	60.5~91.9	1.6	1.15	1.0mm (f)	WR-12	UG-387/U	Right Angle
QWCA-15-1-E-11	50~75	1.35	0.8	1.0mm (m)	WR-15	UG-385/UM	End Launch
QWCA-15-1F-E-11	50~75	1.35	0.8	1.0mm (f)	WR-15	UG-385/UM	End Launch
QWCA-15-V-R-11	50~67	1.6	0.8	1.85mm (m)	WR-15	UG-385/UM	Right Angle
QWCA-15-VF-R-11	50~67	1.6	0.8	1.85mm (f)	WR-15	UG-385/UM	Right Angle
QWCA-19-V-R-10	39.2~59.6	1.5	0.6	1.85mm (m)	WR-19	UG-383/UM	Right Angle
QWCA-19-VF-R-10	39.2~59.6	1.5	0.6	1.85mm (f)	WR-19	UG-383/UM	Right Angle
QWCA-19-V-E-10	39.2~59.6	1.4	0.6	1.85mm (m)	WR-19	UG-383/UM	End Launch
QWCA-19-VF-E-10	39.2~59.6	1.4	0.6	1.85mm (f)	WR-19	UG-383/UM	End Launch
QWCA-22-V-E-5	32.9~50.1	1.3	0.3	1.85mm (m)	WR-22	UG-383/U	End Launch
QWCA-22-VF-E-5	32.9~50.1	1.3	0.3	1.85mm (f)	WR-22	UG-383/U	End Launch
QWCA-22-V-R-5	32.9~50.1	1.3	0.3	1.85mm (m)	WR-22	UG-383/U	Right Angle
QWCA-22-VF-R-5	32.9~50.1	1.3	0.3	1.85mm (f)	WR-22	UG-383/U	Right Angle
QWCA-22-2-E-5	32.9~50.1	1.3	-	2.4mm (m)	WR-22	UG-383/U	End Launch
QWCA-22-2F-E-5	32.9~50.1	1.3	-	2.4mm (f)	WR-22	UG-383/U	End Launch
QWCA-22-2-R-5	32.9~50.1	1.4	-	2.4mm (m)	WR-22	UG-383/U	Right Angle
QWCA-22-2F-R-5	32.9~50.1	1.4	-	2.4mm (f)	WR-22	UG-383/U	Right Angle
QWCA-22-K-R-1	32.9~40	1.2	0.3	2.92mm (m)	WR-22	FBP320	Right Angle
QWCA-22-K-R-5	32.9~40	1.3	0.3	2.92mm (m)	WR-22	UG-383/U	Right Angle
QWCA-22-KF-R-1	32.9~40	1.2	0.3	2.92mm (f)	WR-22	FBP320	Right Angle
QWCA-22-KF-R-5	32.9~40	1.3	0.3	2.92mm (f)	WR-22	UG-383/U	Right Angle
QWCA-28-K-E-1	26.3~40	1.2	-	2.92mm (m)	WR-28	FBP320	End Launch
QWCA-28-KF-E-1	26.3~40	1.2	-	2.92mm (f)	WR-28	FBP320	End Launch
QWCA-28-K-R-1	26.3~40	1.2	-	2.92mm (m)	WR-28	FBP320	Right Angle
QWCA-28-KF-R-1	26.3~40	1.2	-	2.92mm (f)	WR-28	FBP320	Right Angle
QWCA-28-K-E-9	26.3~40	1.2	-	2.92mm (m)	WR-28	FBR320	End Launch
QWCA-28-KF-E-9	26.3~40	1.2	-	2.92mm (f)	WR-28	FBR320	End Launch
QWCA-28-K-R-9	26.3~40	1.2	-	2.92mm (m)	WR-28	FBR320	Right Angle
QWCA-28-KF-R-9	26.3~40	1.2	-	2.92mm (f)	WR-28	FBR320	Right Angle
QWCA-34-K-E-1	22~33	1.2	0.25	2.92mm (m)	WR-34	FBP260	End Launch
QWCA-34-KF-E-1	22~33	1.2	0.25	2.92mm (f)	WR-34	FBP260	End Launch
QWCA-34-K-R-1	22~33	1.2	0.25	2.92mm (m)	WR-34	FBP260	Right Angle
QWCA-34-KF-R-1	22~33	1.2	0.25	2.92mm (f)	WR-34	FBP260	Right Angle
QWCA-42-K-E-1	17.6~26.7	1.2	-	2.92mm (m)	WR-42	FBP220	End Launch
QWCA-42-KF-E-1	17.6~26.7	1.2	-	2.92mm (f)	WR-42	FBP220	End Launch

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Coax Connectors	Waveguide Size	Flange	Configuration
QWCA-42-K-R-1	17.6~26.7	1.2	-	2.92mm (m)	WR-42	FBP220	Right Angle
QWCA-42-KF-R-1	17.6~26.7	1.2	-	2.92mm (f)	WR-42	FBP220	Right Angle
QWCA-42-S-E-1	17.6~26.7	1.2	-	SMA (m)	WR-42	FBP220	End Launch
QWCA-42-SF-E-1	17.6~26.7	1.2	-	SMA (f)	WR-42	FBP220	End Launch
QWCA-42-S-R-1	17.6~26.7	1.2	-	SMA (m)	WR-42	FBP220	Right Angle
QWCA-42-SF-R-1	17.6~26.7	1.2	-	SMA (f)	WR-42	FBP220	Right Angle
QWCA-51-S-R-1	14.5~22	1.2	-	SMA (m)	WR-51	FBP180	Right Angle
QWCA-51-SF-R-1	14.5~22	1.2	-	SMA (f)	WR-51	FBP180	Right Angle
QWCA-51-S-E-1	14.5~22	1.3	0.3	SMA (m)	WR-51	FBP180	End Launch
QWCA-51-SF-E-1	14.5~22	1.3	0.3	SMA (f)	WR-51	FBP180	End Launch
QWCA-51-K-R-1	14.5~22	1.18	-	2.92mm (m)	WR-51	FBP180	Right Angle
QWCA-51-KF-R-1	14.5~22	1.18	-	2.92mm (f)	WR-51	FBP180	Right Angle
QWCA-62-N-R-1	11.9~18	1.2	-	N (m)	WR-62	FBP140	Right Angle
QWCA-62-NF-R-1	11.9~18	1.2	-	N (f)	WR-62	FBP140	Right Angle
QWCA-62-S-E-1	11.9~18	1.2	-	SMA (m)	WR-62	FBP140	End Launch
QWCA-62-SF-E-1	11.9~18	1.2	-	SMA (f)	WR-62	FBP140	End Launch
QWCA-62-S-R-1	11.9~18	1.2	-	SMA (m)	WR-62	FBP140	Right Angle
QWCA-62-SF-R-1	11.9~18	1.2	-	SMA (f)	WR-62	FBP140	Right Angle
QWCA-62-TF-R-1-A	11.9~18	1.2	-	TNC (f)	WR-62	FBP140	Right Angle
QWCA-75-N-E-1	9.84~15	1.2	-	N (m)	WR-75	FBP120	End Launch
QWCA-75-NF-E-1	9.84~15	1.2	-	N (f)	WR-75	FBP120	End Launch
QWCA-75-N-R-1	9.84~15	1.2	-	N (m)	WR-75	FBP120	Right Angle
QWCA-75-NF-R-1	9.84~15	1.2	-	N (f)	WR-75	FBP120	Right Angle
QWCA-75-S-E-1	9.84~15	1.2	-	SMA (m)	WR-75	FBP120	End Launch
QWCA-75-SF-E-1	9.84~15	1.2	-	SMA (f)	WR-75	FBP120	End Launch
QWCA-75-S-R-1	9.84~15	1.2	-	SMA (m)	WR-75	FBP120	Right Angle
QWCA-75-SF-R-1	9.84~15	1.2	-	SMA (f)	WR-75	FBP120	Right Angle
QWCA-90-N-R-4	8.2~12.5	1.2	-	N (m)	WR-90	FDM100	Right Angle
QWCA-90-NF-R-4	8.2~12.5	1.2	-	N (f)	WR-90	FDM100	Right Angle
QWCA-90-S-E-1	8.2~12.5	1.2	0.2	SMA (m)	WR-90	FBP100	End Launch
QWCA-90-SF-E-1	8.2~12.5	1.2	0.2	SMA (f)	WR-90	FBP100	End Launch
QWCA-90-S-R-1	8.2~12.5	1.15	0.2	SMA (m)	WR-90	FBP100	Right Angle
QWCA-90-SF-R-1	8.2~12.5	1.15	0.2	SMA (f)	WR-90	FBP100	Right Angle
QWCA-90-S-E-4	8.2~12.5	1.2	0.2	SMA (m)	WR-90	FDM100	End Launch
QWCA-90-SF-E-4	8.2~12.5	1.2	0.2	SMA (f)	WR-90	FDM100	End Launch
QWCA-90-S-R-4	8.2~12.5	1.15	0.2	SMA (m)	WR-90	FDM100	Right Angle
QWCA-90-SF-R-4	8.2~12.5	1.15	0.2	SMA (f)	WR-90	FDM100	Right Angle
QWCA-112-N-E-1	6.57~9.9	1.2	-	N (m)	WR-112	FBP84	End Launch
QWCA-112-NF-E-1	6.57~9.9	1.2	-	N (f)	WR-112	FBP84	End Launch
QWCA-112-N-R-1	6.57~9.9	1.2	-	N (m)	WR-112	FBP84	Right Angle
QWCA-112-NF-R-1	6.57~9.9	1.2	-	N (f)	WR-112	FBP84	Right Angle
QWCA-112-N-E-2	6.57~9.9	1.2	-	N (m)	WR-112	FDP84	End Launch
QWCA-112-NF-E-2	6.57~9.9	1.2	-	N (f)	WR-112	FDP84	End Launch
QWCA-112-N-R-2	6.57~9.9	1.2	-	N (m)	WR-112	FDP84	Right Angle
QWCA-112-NF-R-2	6.57~9.9	1.2	-	N (f)	WR-112	FDP84	Right Angle
QWCA-112-S-E-1	6.57~9.9	1.2	-	SMA (m)	WR-112	FBP84	End Launch
QWCA-112-SF-E-1	6.57~9.9	1.2	-	SMA (f)	WR-112	FBP84	End Launch
QWCA-112-S-R-1	6.57~9.9	1.2	-	SMA (m)	WR-112	FBP84	Right Angle
QWCA-112-SF-R-1	6.57~9.9	1.2	-	SMA (f)	WR-112	FBP84	Right Angle
QWCA-112-S-E-2	6.57~9.9	1.2	-	SMA (m)	WR-112	FDP84	End Launch
QWCA-112-SF-E-2	6.57~9.9	1.2	-	SMA (f)	WR-112	FDP84	End Launch
QWCA-112-S-R-2	6.57~9.9	1.2	-	SMA (m)	WR-112	FDP84	Right Angle
QWCA-112-SF-R-2	6.57~9.9	1.2	-	SMA (f)	WR-112	FDP84	Right Angle
QWCA-112-S-E-4	6.57~9.9	1.2	-	SMA (m)	WR-112	FDM84	End Launch
QWCA-112-SF-E-4	6.57~9.9	1.2	-	SMA (f)	WR-112	FDM84	End Launch
QWCA-112-S-R-4	6.57~9.9	1.2	-	SMA (m)	WR-112	FDM84	Right Angle
QWCA-112-SF-R-4	6.57~9.9	1.2	-	SMA (f)	WR-112	FDM84	Right Angle
QWCA-112-TF-R-1-A	6.57~9.99	1.2	-	TNC (f)	WR-112	FBP84	Right Angle
QWCA-137-N-E-2	5.38~8.17	1.25	0.3	N (m)	WR-137	FDP70	End Launch
QWCA-137-NF-E-2	5.38~8.17	1.25	0.3	N (f)	WR-137	FDP70	End Launch
QWCA-137-N-R-2	5.38~8.17	1.2	-	N (m)	WR-137	FDP70	Right Angle
QWCA-137-NF-R-2	5.38~8.17	1.2	-	N (f)	WR-137	FDP70	Right Angle

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Coax Connectors	Waveguide Size	Flange	Configuration
QWCA-137-N-E-4	5.38~8.17	1.25	0.3	N (m)	WR-137	FDM70	End Launch
QWCA-137-NF-E-4	5.38~8.17	1.25	0.3	N (f)	WR-137	FDM70	End Launch
QWCA-137-N-R-4	5.38~8.17	1.2	-	N (m)	WR-137	FDM70	Right Angle
QWCA-137-NF-R-4	5.38~8.17	1.2	-	N (f)	WR-137	FDM70	Right Angle
QWCA-137-S-R-2	5.38~8.17	1.2	-	SMA (m)	WR-137	FDP70	Right Angle
QWCA-137-SF-R-2	5.38~8.17	1.2	-	SMA (f)	WR-137	FDP70	Right Angle
QWCA-137-S-R-4	5.38~8.17	1.2	-	SMA (m)	WR-137	FDM70	Right Angle
QWCA-137-SF-R-4	5.38~8.17	1.2	-	SMA (f)	WR-137	FDM70	Right Angle
QWCA-159-N-R-2	4.64~7.05	1.2	-	N (m)	WR-159	FDP58	Right Angle
QWCA-159-NF-R-2	4.64~7.05	1.2	-	N (f)	WR-159	FDP58	Right Angle
QWCA-159-S-E-2	4.64~7.05	1.2	-	SMA (m)	WR-159	FDP58	End Launch
QWCA-159-SF-E-2	4.64~7.05	1.2	-	SMA (f)	WR-159	FDP58	End Launch
QWCA-159-S-R-2	4.64~7.05	1.2	-	SMA (m)	WR-159	FDP58	Right Angle
QWCA-159-SF-R-2	4.64~7.05	1.2	-	SMA (f)	WR-159	FDP58	Right Angle
QWCA-159-S-E-4	4.64~7.05	1.2	-	SMA (m)	WR-159	FDM58	End Launch
QWCA-159-SF-E-4	4.64~7.05	1.2	-	SMA (f)	WR-159	FDM58	End Launch
QWCA-159-S-R-4	4.64~7.05	1.2	-	SMA (m)	WR-159	FDM58	Right Angle
QWCA-159-SF-R-4	4.64~7.05	1.2	-	SMA (f)	WR-159	FDM58	Right Angle
QWCA-187-N-R-2	3.94~5.99	1.2	-	N (m)	WR-187	FDP48	Right Angle
QWCA-187-NF-R-2	3.94~5.99	1.2	-	N (f)	WR-187	FDP48	Right Angle
QWCA-187-S-R-2	3.94~5.99	1.15	-	SMA (m)	WR-187	FDP48	Right Angle
QWCA-187-SF-R-2	3.94~5.99	1.15	-	SMA (f)	WR-187	FDP48	Right Angle
QWCA-229-N-R-2	3.22~4.9	1.2	-	N (m)	WR-229	FDP40	Right Angle
QWCA-229-NF-R-2	3.22~4.9	1.2	-	N (f)	WR-229	FDP40	Right Angle
QWCA-229-S-R-2	3.22~4.9	1.2	-	SMA (m)	WR-229	FDP40	Right Angle
QWCA-229-SF-R-2	3.22~4.9	1.2	-	SMA (f)	WR-229	FDP40	Right Angle
QWCA-229-TF-R-2-A	3.22~4.9	1.2	-	TNC (f)	WR-229	FDP40	Right Angle
QWCA-284-N-R-2	2.6~3.95	1.2	-	N (m)	WR-284	FDP32	Right Angle
QWCA-284-NF-R-2	2.6~3.95	1.2	-	N (f)	WR-284	FDP32	Right Angle
QWCA-284-S-R-2	2.6~3.95	1.2	-	SMA (m)	WR-284	FDP32	Right Angle
QWCA-284-SF-R-2	2.6~3.95	1.2	-	SMA (f)	WR-284	FDP32	Right Angle
QWCA-340-7-R-2	2.17~3.3	1.2	-	7/16 DIN (L29) (m)	WR-340	FDP26	Right Angle
QWCA-340-7F-R-2	2.17~3.3	1.2	-	7/16 DIN (L29) (f)	WR-340	FDP26	Right Angle
QWCA-340-N-R-2	2.17~3.3	1.2	-	N (m)	WR-340	FDP26	Right Angle
QWCA-340-NF-R-2	2.17~3.3	1.2	-	N (f)	WR-340	FDP26	Right Angle
QWCA-340-S-R-2	2.17~3.3	1.2	-	SMA (m)	WR-340	FDP26	Right Angle
QWCA-340-SF-R-2	2.17~3.3	1.2	-	SMA (f)	WR-340	FDP26	Right Angle
QWCA-430-N-R-2	1.72~2.61	1.2	-	N (m)	WR-430	FDP22	Right Angle
QWCA-430-NF-R-2	1.72~2.61	1.2	-	N (f)	WR-430	FDP22	Right Angle
QWCA-430-S-R-2	1.72~2.61	1.2	-	SMA (m)	WR-430	FDP22	Right Angle
QWCA-430-SF-R-2	1.72~2.61	1.2	-	SMA (f)	WR-430	FDP22	Right Angle
QWCA-510-N-R-2	1.45~2.2	1.2	-	N (m)	WR-510	FDP18	Right Angle
QWCA-510-NF-R-2	1.45~2.2	1.2	-	N (f)	WR-510	FDP18	Right Angle
QWCA-510-S-R-2	1.45~2.2	1.2	-	SMA (m)	WR-510	FDP18	Right Angle
QWCA-510-SF-R-2	1.45~2.2	1.2	-	SMA (f)	WR-510	FDP18	Right Angle
QWCA-650-N-R-2	1.13~1.73	1.2	-	N (m)	WR-650	FDP14	Right Angle
QWCA-650-NF-R-2	1.13~1.73	1.2	-	N (f)	WR-650	FDP14	Right Angle
QWCA-770-N-R-2	0.96~1.46	1.2	-	N (m)	WR-770	FDP12	Right Angle
QWCA-770-NF-R-2	0.96~1.46	1.2	-	N (f)	WR-770	FDP12	Right Angle
QWCA-770-S-R-2	0.96~1.46	1.2	-	SMA (m)	WR-770	FDP12	Right Angle
QWCA-770-SF-R-2	0.96~1.46	1.2	-	SMA (f)	WR-770	FDP12	Right Angle
QWCA-975-7-R-2	0.76~1.15	1.25	-	7/16 DIN (L29) (m)	WR-975	FDP9	Right Angle
QWCA-975-7F-R-2	0.76~1.15	1.25	-	7/16 DIN (L29) (f)	WR-975	FDP9	Right Angle
QWCA-975-N-R-2	0.76~1.15	1.2	-	N (m)	WR-975	FDP9	Right Angle
QWCA-975-NF-R-2	0.76~1.15	1.2	-	N (f)	WR-975	FDP9	Right Angle
QWCA-975-S-R-2	0.76~1.15	1.2	-	SMA (m)	WR-975	FDP9	Right Angle
QWCA-975-SF-R-2	0.76~1.15	1.2	-	SMA (f)	WR-975	FDP9	Right Angle
QWCA-1150-N-R-2	0.64~0.98	1.3	-	N (m)	WR-1150	FDP9	Right Angle
QWCA-1150-NF-R-2	0.64~0.98	1.3	-	N (f)	WR-1150	FDP9	Right Angle

Double Ridged Waveguide to Coax Adapters

Part Number	Frequency (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Coax Connectors	Waveguide Size	Flange	Configuration
QWCA-D180-K-E-8	18~40	1.4	-	2.92mm (m)	WRD-180	FPWRD180	End Launch
QWCA-D180-KF-E-8	18~40	1.4	-	2.92mm (f)	WRD-180	FPWRD180	End Launch
QWCA-D180-K-R-8	18~40	1.3	-	2.92mm (m)	WRD-180	FPWRD180	Right Angle
QWCA-D180-KF-R-8	18~40	1.3	-	2.92mm (f)	WRD-180	FPWRD180	Right Angle
QWCA-D110-S-R-8	11~26.5	1.25	-	SMA (m)	WRD-110	FPWRD110	Right Angle
QWCA-D110-SF-R-8	11~26.5	1.25	-	SMA (f)	WRD-110	FPWRD110	Right Angle
QWCA-D750-N-R-8	7.5~18	1.3	-	N (m)	WRD-750	FPWRD750	Right Angle
QWCA-D750-NF-R-8	7.5~18	1.3	-	N (f)	WRD-750	FPWRD750	Right Angle
QWCA-D750-S-R-8	7.5~18	1.25	-	SMA (m)	WRD-750	FPWRD750	Right Angle
QWCA-D750-SF-R-8	7.5~18	1.25	-	SMA (f)	WRD-750	FPWRD750	Right Angle
QWCA-D650-N-R-8	6~18	1.3	-	N (m)	WRD-650	FPWRD650	Right Angle
QWCA-D650-NF-R-8	6~18	1.3	-	N (f)	WRD-650	FPWRD650	Right Angle
QWCA-D650-S-R-8	6~18	1.25	-	SMA (m)	WRD-650	FPWRD650	Right Angle
QWCA-D650-SF-R-8	6~18	1.25	-	SMA (f)	WRD-650	FPWRD650	Right Angle
QWCA-D580-S-R-8	5.8~16	1.4	-	SMA (m)	WRD-580	FPWRD580	Right Angle
QWCA-D580-SF-R-8	5.8~16	1.4	-	SMA (f)	WRD-580	FPWRD580	Right Angle
QWCA-D475-N-R-8	4.75~11	1.2	-	N (m)	WRD-475	FPWRD475D24	Right Angle
QWCA-D475-NF-R-8	4.75~11	1.2	-	N (f)	WRD-475	FPWRD475D24	Right Angle
QWCA-D350-N-R-8	3.5~8.2	1.4	-	N (m)	WRD-350	FPWRD350	Right Angle
QWCA-D350-NF-R-8	3.5~8.2	1.4	-	N (f)	WRD-350	FPWRD350	Right Angle
QWCA-D250-N-R-8	2.6~7.8	1.4	0.4	N (m)	WRD-250	FPWRD250	Right Angle
QWCA-D250-NF-R-8	2.6~7.8	1.4	0.4	N (f)	WRD-250	FPWRD250	Right Angle
QWCA-D250-7-R-8	2.5~6	1.5	0.3	7/16 DIN (L29) (m)	WRD-250	FPWRD250	Right Angle
QWCA-D250-7F-R-8	2.5~6	1.5	0.3	7/16 DIN (L29) (f)	WRD-250	FPWRD250	Right Angle
QWCA-D200-N-R-8	2~6	1.3	-	N (m)	WRD-200	FPWRD200	Right Angle
QWCA-D200-NF-R-8	2~6	1.3	-	N (f)	WRD-200	FPWRD200	Right Angle
QWCA-D150-N-R-8	1.5~3.6	1.35	-	N (m)	WRD-150	FPWRD150	Right Angle
QWCA-D150-NF-R-8	1.5~3.6	1.35	-	N (f)	WRD-150	FPWRD150	Right Angle
QWCA-D84-N-R-8	0.84~2	1.25	-	N (m)	WRD-84	FPWRD84	Right Angle
QWCA-D84-NF-R-8	0.84~2	1.25	-	N (f)	WRD-84	FPWRD84	Right Angle

Appendix

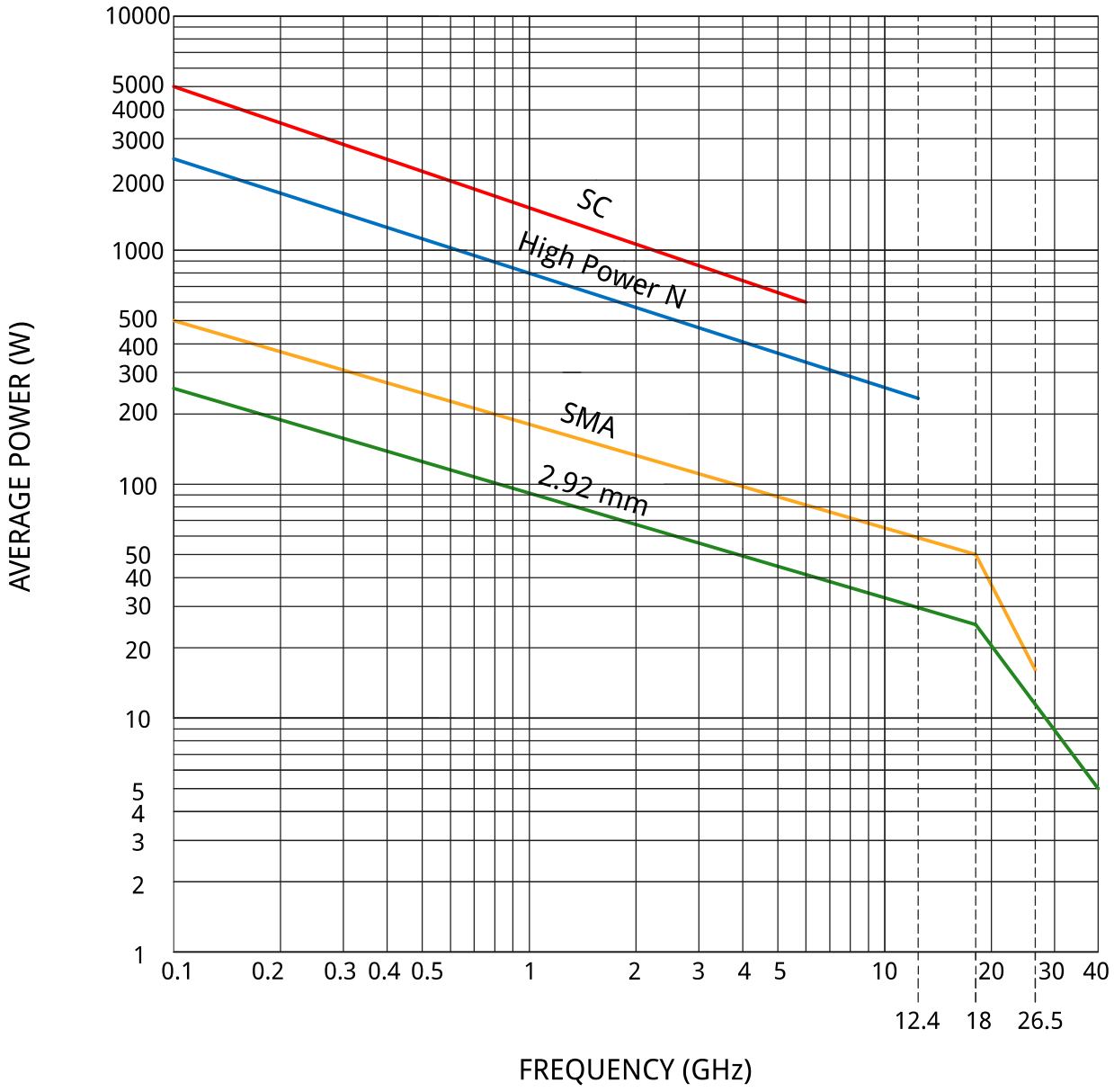
Circular Waveguide Sizes

Frequency Band	Frequency (GHz)	Circular Waveguide Size (Inches)	Circular Waveguide Size (mm)
X	8.2~9.97	1.1	27.79
	8.5~11.6	0.9	23.83
	9.97~12.4	0.8	20.24
Ku	12.4~15.9	0.7	17.48
	13.4~18.0	0.6	15.08
	15.9~18.0	0.5	12.7
K	17.5~20.5	0.5	11.56
	20~24.5	0.4	10.06
	24~26.5	0.3	8.33
Ka	26.5~33	0.3	8
	33~38.5	0.3	6.35
	38.5~40	0.2	5.56
Q	33~38.5	0.3	6.35
	38.5~43	0.2	5.56
	43~50	0.2	4.78
U	40~43	0.2	5.33
	43~50	0.2	4.78
	50~60	0.2	4.19
V	50~58	0.2	4.19
	58~68	0.1	3.58
	68~75	0.1	3.18
E	60~66	0.1	3.45
	66~82	0.1	3.18
	82~90	0.1	2.39
W	75~88	0.11	2.84
	88~110	0.09	2.39
F	90~115	0.1	2.26
	115~140	0.1	1.91
D	110~140	0.07	1.85
	140~160	0.06	1.5
G	140~180	0.1	1.47
	180~220	0.0	1.14
?	170~260	0.05	1.25
	220~325	0.04	0.99

Coaxial Switches Power Curve

Power handling capability of a switch depends on the connector type, materials, and the mechanical design. Temperature and frequency are also important factors which affect the power capacity of a switch in operation.

The power chart below describes the Avg. Power versus frequency for different connector types. (Based on 20°C environmental temperature.) The power capability decreases as the frequency increases. Connectors like SC, N can handle more power compared to others while the frequency is limited to a smaller range.



dBm To Watt Conversion Table

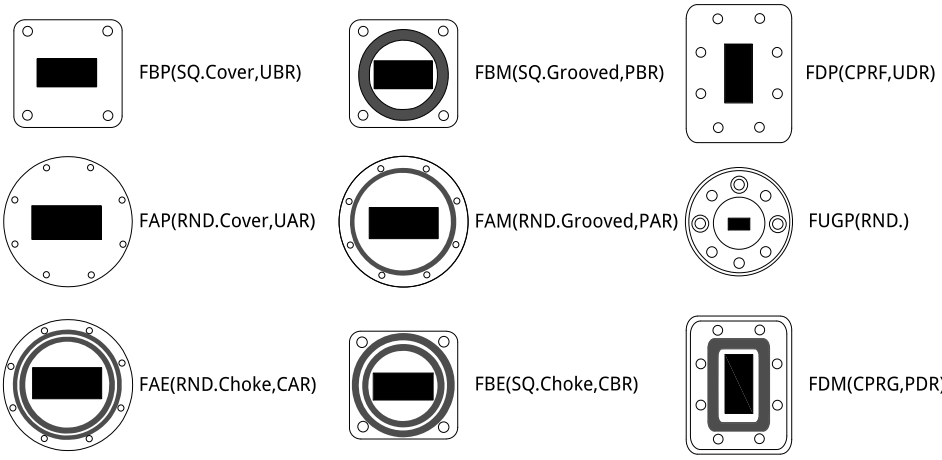
dBm	mW
-60	0.000001
-50	0.00001
-40	0.0001
-30	0.001
-29	0.0013
-28	0.0016
-27	0.002
-26	0.0025
-25	0.0032
-24	0.004
-23	0.005
-22	0.0063
-21	0.0079
-20	0.01
-19	0.0126
-18	0.0158
-17	0.02
-16	0.0251
-15	0.0316
-14	0.0398
-13	0.0501
-12	0.0631
-11	0.0794
-10	0.1
-9	0.1259
-8	0.16
-7	0.2
-6	0.25
-5	0.32
-4	0.4
-3	0.5
-2	0.63
-1	0.79

dBm	mW
0	1
1	1.26
2	1.58
3	2
4	2.51
5	3.16
6	3.98
7	5.01
8	6.31
9	7.94
10	10
11	12.59
12	15.85
13	19.95
14	25.12
15	31.62
16	39.81
17	50
18	63
19	79
20	100
21	126
22	158
23	200
24	251
25	316
26	398
27	501
28	631
29	794

dBm	W
30	1
31	1.3
32	1.6
33	2
34	2.5
35	3.2
36	4
37	5
38	6.3
39	7.9
40	10
41	12.6
42	15.8
43	20
44	25.1
45	31.6
46	39.8
47	50.1
48	63.1
49	79.4
50	100
51	125.9
52	158.5
53	199.5
54	251.2
55	316.2
56	398.1
57	501.1
58	630.9
59	794.3

dBm	kW
60	1
61	1.26
62	1.58
63	2
64	2.51
65	3.16
66	3.98
67	5.01
68	6.31
69	7.94
70	10
71	12.59
72	15.85
73	19.95
74	25.12
75	31.62
76	39.81
77	50.12
78	63.1
79	79.43
80	100
81	125.98
82	158.48
83	199.52
84	251.18
85	316.22
86	398.10
87	501.18
88	630.95
89	794.43

Rectangular Waveguide & Flange Cross Reference



Waveguide Type				Inside Dimensions	Frequency Range	China Flange	EIA Flange	IEC Flange
China	EIA	UK	153-IEC	(mm)	(GHz)			
BJ900	WR10	WG27	R900	2.54*1.27	73.8-112	FUGP900	UG387/UM	
BJ740	WR12	WG26	R740	3.0988*1.5494	60.5-91.9	FUGP740	UG387/U	
BJ620	WR15	WG25	R620	3.795*1.88	49.8-75.8	FUGP620	UG385/U	
BJ500	WR19	WG24	R500	4.775*2.388	39.2-59.6	FUGP500	UG383/UM	
BJ400	WR22	WG23	R400	5.69*2.845	32.9-50.1	FUGP400	UG-383/U	
BJ320	WR28	WG22	R320	7.12*3.556	26.3-40	FBP320	UG599/U	UBR320
BJ320	WR28	WG22	R320	7.12*3.556	26.3-40	FBM320	UG Grooved	PBR320
BJ320	WR28	WG22	R320	7.12*3.556	26.3-40	FBE320	UG600A/U	CBR320
BJ260	WR34	WG21	R260	8.636*4.318	21.7-33	FBP260		UBR260
BJ260	WR34	WG21	R260	8.636*4.318	21.7-33	FBM260		PBR260
BJ260	WR34	WG21	R260	8.636*4.318	21.7-33	FBE260		CBR260
BJ220	WR42	WG20	R220	10.668*4.318	17.6-26.7	FBP220	UG597/U, UG595/U	UBR220
BJ220	WR42	WG20	R220	10.668*4.318	17.6-26.7	FBM220	UG Grooved	PBR220
BJ220	WR42	WG20	R220	10.668*4.318	17.6-26.7	FBE220	UG Choke	CBR220
BJ180	WR51	WG19	R180	12.95*6.477	14.5-22	FBP180		UBR180
BJ180	WR51	WG19	R180	12.95*6.477	14.5-22	FBM180		PBR180
BJ180	WR51	WG19	R180	12.95*6.477	14.5-22	FBE180		CBR180
BJ140	WR62	WG18	R140	15.799*7.899	11.9-18	FBP140	UG1665/U, UG419/U	UBR140
BJ140	WR62	WG18	R140	15.799*7.899	11.9-18	FBM140	UG Grooved	PBR140
BJ140	WR62	WG18	R140	15.799*7.899	11.9-18	FBE140	UG1666/U, UG541A/U	CBR140
BJ120	WR75	WG17	R120	19.05*9.525	9.84-15	FDP120	CPR75F	UDR120
BJ120	WR75	WG17	R120	19.05*9.525	9.84-15	FDM120	CPR75G	PDR120
BJ120	WR75	WG17	R120	19.05*9.525	9.84-15	FBP120	UG Cover	UBR120
BJ120	WR75	WG17	R120	19.05*9.525	9.84-15	FBM120	UG Grooved	PBR120
BJ120	WR75	WG17	R120	19.05*9.525	9.84-15	FBE120	UG-136B, UG-40B/U	CBR120
BJ100	WR90	WG16	R100	22.86*10.16	8.2-12.5	FDP100	CPR90F	UDR100
BJ100	WR90	WG16	R100	22.86*10.16	8.2-12.5	FDM100	CPR90G	PDR100
BJ100	WR90	WG16	R100	22.86*10.16	8.2-12.5	FBP100	UG135/U	UBR100
BJ100	WR90	WG16	R100	22.86*10.16	8.2-12.5	FBM100	UG 135 Grooved, UG 39 Grooved	PBR100
BJ100	WR90	WG16	R100	22.86*10.16	8.2-12.5	FBE100	UG-136B/U, UG 39 Grooved	CBR100
BJ84	WR112	WG15	R84	28.499*12.624	6.57-9.99	FDP84	CPR112F	UDR84
BJ84	WR112	WG15	R84	28.499*12.624	6.57-9.99	FDM84	CPR112G	PDR84
BJ84	WR112	WG15	R84	28.499*12.624	6.57-9.99	FBP84	UG138/U, UG51/U	UBR84
BJ84	WR112	WG15	R84	28.499*12.624	6.57-9.99	FBM84	UG138 Grooved, UG51 Grooved	PBR84
BJ84	WR112	WG15	R84	28.499*12.624	6.57-9.99	FBE84	UG-137B/U, UG-52B/U	CBR84
BJ70	WR137	WG14	R70	34.849*15.799	5.38-8.17	FDP70	CPR137F	UDR70
BJ70	WR137	WG14	R70	34.849*15.799	5.38-8.17	FDM70	CPR137G	PDR70
BJ70	WR137	WG14	R70	34.849*15.799	5.38-8.17	FAP70	UG441/U, UG344/U	
BJ70	WR137	WG14	R70	34.849*15.799	5.38-8.17	FAM70		
BJ70	WR137	WG14	R70	34.849*15.799	5.38-8.17	FAE70		
BJ58	WR159	WG13	R58	40.386*20.193	4.64-7.05	FDP58	CPR159F	UDR58
BJ58	WR159	WG13	R58	40.386*20.193	4.64-7.05	FDM58	CPR159G	PDR58
BJ48	WR187	WG12	R48	47.549*22.149	3.94-5.99	FDP48	CPR187F	UDR48
BJ48	WR187	WG12	R48	47.549*22.149	3.94-5.99	FDM48	CPR187G	PDR48

Waveguide Type				Inside Dimensions	Frequency Range	China Flange	EIA Flange	IEC Flange
China	EIA	UK	153-IEC	(mm)	(GHz)			
BJ48	WR187	WG12	R48	47.549*22.149	3.94-5.99	FAP48	UG407/U	
BJ48	WR187	WG12	R48	47.549*22.149	3.94-5.99	FAM48		
BJ48	WR187	WG12	R48	47.549*22.149	3.94-5.99	FAE48	UG-406B/U, UG-148C/U	
BJ40	WR229	WG11A	R40	58.17*29.08	3.22-4.9	FDP40	CPR229F	UDR40
BJ40	WR229	WG11A	R40	58.17*29.08	3.22-4.9	FDM40	CPR229G	PDR40
BJ32	WR284	WG10	R32	72.14*34.04	2.6-3.95	FDP32	CPR284F	UDR32
BJ32	WR284	WG10	R32	72.14*34.04	2.6-3.95	FDM32	CPR284G	PDR32
BJ32	WR284	WG10	R32	72.14*34.04	2.6-3.95	FAP32	UG584/U, UG53/U	
BJ32	WR284	WG10	R32	72.14*34.04	2.6-3.95	FAM32		
BJ32	WR284	WG10	R32	72.14*34.04	2.6-3.95	FAE32	UG-585, UG-54	
BJ26	WR340	WG9	R26	86.36*43.18	2.17-3.3	FDP26	CPR340F	UDR26
BJ26	WR340	WG9	R26	86.36*43.18	2.17-3.3	FDM26	CPR340G	PDR26
BJ22	WR430	WG8	R22	109.22*54.61	1.72-2.61	FDP22	CPR430F	UDR22
BJ22	WR430	WG8	R22	109.22*54.61	1.72-2.61	FDM22	CPR430G	PDR22
BJ18	WR510	WG7	R18	129.54*64.77	1.45-2.2	FDP18		UDR18
BJ14	WR650	WG6	R14	165.1*82.55	1.13-1.73	FDP14	CPR650F	UDR14
BJ14	WR650	WG6	R14	165.1*82.55	1.13-1.73	FDM14	CPR650G	PDR14
BJ12	WR770	WG5	R12	195.58*97.79	0.96-1.46	FDP12	CPR770F	UDR12
BJ9	WR975	WG4	R9	247.65*123.82	0.76-1.15	FDP9	CPR975F	UDR9
BJ9	WR975	WG4	R9	247.65*123.82	0.76-1.15	FDM9	CPR975G	PDR9
BJ8	WR1150	WG3	R8	292.1*146.05	0.64-0.98	FDP8		
BJ6	WR1500	WG2	R6	381*190.5	0.49-0.75	FDP6		
BJ5	WR1800	WG1	R5	457.2*228.6	0.41-0.62	FDP5		
BJ4	WR2100	N/A	R4	533.4*266.7	0.35-0.53	FDP4		
BJ3	WR2300	N/A	R3	584.2*292.1	0.32-0.49	FDP3		

VSWR To Return Loss Conversion Table

VSWR	Return Loss (dB)	VSWR	Return Loss (dB)	VSWR	Return Loss (dB)	VSWR	Return Loss (dB)
1.01	46.1	1.13	24.3	1.45	14.7	3.5	5.1
1.02	40.1	1.14	23.7	1.5	14	4	4.4
1.03	36.6	1.15	23.1	1.6	12.7	5	3.5
1.04	34.2	1.16	22.6	1.7	11.7	6	2.9
1.05	32.3	1.17	22.1	1.8	10.9	7	2.5
1.06	30.7	1.18	21.7	1.9	10.2	8	2.2
1.07	29.4	1.19	21.2	2	9.5	9	1.9
1.08	28.3	1.2	20.8	2.2	8.5	10	1.7
1.09	27.3	1.25	19.1	2.4	7.7	20	0.9
1.1	26.4	1.3	17.7	2.6	7		
1.11	25.7	1.35	16.5	2.8	6.5		
1.12	24.9	1.4	15.6	3	6		

Voltage To Power Conversion Table

Vpp (mV)	Power (dBm)	Vpp (mV)	Power (dBm)	Vpp (V)	Power (dBm)	Vpp (V)	Power (dBm)	Vpp (V)	Power (dBm)
1	-56	65	-19.8	0.45	-3	10	24	30	33.5
2	-50	70	-19.1	0.5	-2	11	24.8	31	33.8
3	-46.5	75	-18.5	0.55	-1.2	12	25.6	32	34.1
4	-44	80	-18	0.6	-0.5	13	26.3	33	34.3
5	-42	85	-17.4	0.65	0.2	14	26.9	34	34.6
6	-40.5	90	-16.9	0.7	0.9	15	27.5	35	34.9
7	-39.1	95	-16.5	0.75	1.5	16	28.1	36	35.1
8	-38	100	-16	0.8	2	17	28.6	37	35.3
9	-36.9	120	-14.4	0.85	2.6	18	29.1	38	35.6
10	-36	140	-13.1	0.9	3.1	19	29.6	39	35.8
15	-32.5	160	-11.9	0.95	3.5	20	30	40	36
20	-30	180	-10.9	1	4	21	30.4	41	36.2
25	-28.1	200	-10	2	10	22	30.8	42	36.4
30	-26.5	220	-9.2	3	13.5	23	31.2	43	36.6
35	-25.1	240	-8.4	4	16	24	31.6	44	36.8
40	-24	260	-7.7	5	18	25	31.9	45	37
45	-23	280	-7.1	6	19.5	26	32.3	50	38
50	-22	300	-6.5	7	20.9	27	32.6	100	44
55	-21.2	350	-5.1	8	22	28	32.9	120	45.6
60	-20.5	400	-4	9	23.1	29	33.2	220	50.8

Product Naming Rules

Connector Naming Rules

Code	Connector
1	1.0mm (110GHz)
M1	NMD1.0mm(110GHz)
5	1.35(90GHz)
V	1.85mm (67GHz)
G	Mini-SMP (mateable with GPPO & SSMP, 65GHz)
2	2.4mm (50GHz)
M2	NMD2.4mm(50GHz)
K	2.92mm (40GHz)
MK	NMD2.92mm(40GHz)
X	MMCX (40GHz)
P	SMP (40GHz)
A	SSMA (40GHz)
3	3.5mm (33GHz)
M3	NMD3.5mm(26.5GHz)
S	SMA (26.5GHz)
N	N (18GHz)
T	TNC (18GHz)
J	APC-7 (7mm, 18GHz)
I	BMA (18GHz)
W	SSMC(17GHz)
6	SMC(10GHz)
L1	L16 (9GHz)
4	4.3-10 (8GHz)
E	SC (theoretical 11GHz, usually 6GHz)

Code	Connector
Q	QMA(6GHz)
7	7/16 DIN (L29)(6GHz)
L	L27(6GHz)
L2	L12(6GHz)
M	MCX (6GHz)
D	SMB (6GHz)
U	SSMB(6GHz)
Y	HN(6GHz)
IPX	IPX-MHF(6GHz)
Nex	Nex10(6GHz)
B	BNC (4GHz)
B1	TRB/BNC Triax/Q9 female (4GHz)
F	F (2GHz)
Z	UHF(1GHz)
S1	SHV(300MHz)
M4	MHV(300MHz)
SI	SBMA
8	Mini DIN
A2	IF110
O	SSBB
IP	IPEX
9	IF45
A1	IF70

Remarks: The cable assembly generally has two connectors. If the two connectors are of different types, the connector with high frequency will be described first when naming, and the connector with low frequency will be described. For example, 2.4mm female - 2.92mm male Represented by "2FK", instead of "K2F".

Connector Polarity Naming Rules

Code	Polarity of Connector	Description
M	Male	Internal Thread, Internal Needle
MRP	Reverse Polarity Male	Internal Thread, Internal Hole

Code	Polarity of Connector	Description
F	Female	External Thread, Internal Hole
FRP	Reverse Polarity Female	External Thread, Internal Needle

Remarks: Each type of product has a default connector polarity. In naming, for simplicity and clarity, certain deletions will be made in combination with product characteristics. For example:

Cable assembly: the default polarity of the connector is male, so the "M" indicating male should be omitted when naming. Taking connector N as an example, N is represented by "N male", and N female is represented by "NF".

Attenuator: the default input connector is male, and the output connector is female. So when naming connector N, "N" represents N male input - N female output, "NFNF" represents N female input - N female output, and "NFSF" represents N female input - SMA female output.

Other module components: all connectors are female by default, so "F" indicating female shall be omitted when naming.

Configuration Naming Rules

Code	Configuration
E	End Launch (Only applicable to waveguide to coax adapters, other products are not marked)
L2	2-Hole Flange
H	Bulk Head

Code	Configuration
R	Right Angle
L4	4-Hole Flange
Y	Threaded Connection

Remarks: In the cable assembly, when describing the cable connector, the sequence is: type - polarity - configuration. For example, "SFL4" means SMA female with 4-hole flange, and "SFH" means SMA female bulk head.

Power Naming Rules

Code	Power (dBm)
1	1
2	2
3	3
4	4
5	5
...	...

Code	Power (W)
R1	0.1
R2	0.2
R3	0.3
R4	0.4
...	...
R9	0.9

Code	Power (W)
1	1
2	2
3	3
4	4
...	...
9	9

Code	Power (W)
10	10
15	15
20	20
25	25
...	...
90	90

Code	Power (W)
K1	100
K15	150
K2	200
K25	250
...	...
K9	900

Code	Power (W)
1K	1000
1K5	1500
2K	2000
2K5	2500
...	...
75K	75000

Waveguide Size Naming Rules

Code	Waveguide Size
10	WR-10
12	WR-12
15	WR-15
19	WR-19
...	...
1150	WR-1150

Code	Waveguide Size
D84	WRD-84
D110	WRD-110
D150	WRD-150
D180	WRD-180
...	...
D750	WRD-750

Code	Waveguide Size
22	C22
25	C25
30	C30
35	C35
...	...
890	C890

Flange Naming Rules

Code	Flange
1	FBP
2	FDP
3	FBM
4	FDM
5	UG-383/U (mateable with FUGP400)
6	UG-385/U

Code	Flange
7	UG-387/U
8	FPWRD
9	FBR
10	UG-383/UM (mateable with FUGP500)
11	UG-385/UM (mateable with FUGP620)

Material Naming Rules

Code	Material
A	Aluminium
G	Passivated Stainless Steel

Code	Material
B	Brass

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