

QA360

Ultra Low Loss & Phase Stable

Features:

- * Low Insertion Loss
- * High Phase Stability
- * High Power
- * Low PIM

Applications:

- * Phased-array Radar
- * Satellite Communication
- * Avionics

Electrical

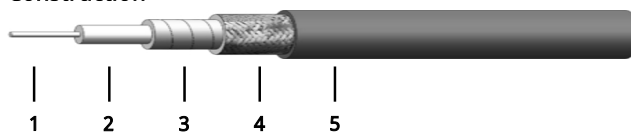
Frequency:	DC~40GHz
Cut-off Frequency:	48GHz
Impedance:	50Ω
Velocity of Propagation:	82%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	500V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

Mechanical

Bend Radius (installation):	18.0mm
Bend Radius (repeated):	36.0mm
Weight:	33g/m

Environmental

Temperature: -55~+165°C

Construction


No.	Name	Size (mm)	Material
1	Inner Conductor	0.91	Silver-plated copper
2	Dielectric	2.50	Low density PTFE
3	Inner Shield	2.66	Silver-plated copper tape
4	Outer Shield	3.11	Silver-plated copper braid
5	Jacket	3.60	PFA

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	8	12	18	26.5	40
Attenuation*1 (dB/100m)	11.8	20.4	26.4	37.5	53.4	76.1	93.9	109.0	134.6	166.7	204.8	255.7
Average Power*2 (W)	1626	936	723	509	358	251	203	175	142	115	93	75

[1] VSWR:1.0; Ambient: +25°C (77°F)

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

 Calculate Cable Attenuation: Attenuation (dB/100m) = $1.168470 * \sqrt{F \text{ (MHz)}} + 0.000550 * F \text{ (MHz)}$

 Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F \text{ (GHz)}}$
How To Order
QA360-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QA360 cable assembly, DC-40GHz, 2.4mm male to 2.92mm female, 0.8 meter, specify QA360-40-2KF-0.8.

Connector naming rules:

- 2- 2.4mm (40GHz, VSWR 1.35)
- K - 2.92mm (40GHz, VSWR 1.35)
- A - SSMA (40GHz, VSWR 1.35)
- 3 - 3.5mm (33GHz, VSWR 1.35)
- S - SMA (26.5GHz, VSWR 1.3)
- N - N (18GHz, VSWR 1.25)
- T - TNC (18GHz, VSWR 1.3)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)

Mating Connector

QC2-MG-A360-2

2.4mm male, Stainless steel

QC2-FG-A360-3

2.4mm female, Stainless steel

QCK-MG-A360-1

2.92mm male, Stainless steel


QCK-FG-A360-1

2.92mm female, Stainless steel


QCK-MRG-A360-1

2.92mm male right angle, Stainless steel


QCK-FL4G-A360-1

2.92mm female, 4-hole flange, Stainless steel

QCP-FB-A360-3

SMP female, Beryllium copper

QCA-MG-A360-1

SSMA male, Stainless steel

QC3-MG-A360-2

3.5mm male, Stainless steel

QC3-FG-A360-1

3.5mm female, Stainless steel

QCS-MG-A360-1

SMA male, Stainless steel


QCS-MRG-A360-1

SMA male right angle, Stainless steel


QCS-FG-A360-1

SMA female, Stainless steel

QCS-FL4G-A360-1

SMA female, 4-hole flange, Stainless steel

QCN-MG-A360-1

N male, Stainless steel


QCN-FG-A360-1

N female, Stainless steel

QCN-FL4G-A360-1

N female, 4-hole flange, Stainless steel

QCT-MG-A360-2

TNC male, Stainless steel