

QFA1802

DC~18GHz, 2W

Features:
 * Low VSWR
 * High Attenuation Flatness

Applications:
 * Wireless
 * Transmitter
 * Laboratory Test
 * Radar



Electrical

Frequency:	DC~18GHz
	DC~6GHz (BNC)
Attenuation:	0~10, 12, 15, 20, 30, 40, 50, 60dB
Impedance:	50Ω
Average Power ^{*1} :	2W@25°C max.

[1] Derated linearly to 0.1W@120°C.

Mechanical

RF Connectors: SMA, N, TNC, BNC, SMP, SSMP,
SSMA

Peak Power

Peak Power (W)	Pulse Width (μS)	Duty Cycle (%)	Applicable Scope
20		1	SMP, SSMA, SSMP
200	5	0.5	SMA, N
500		0.2	BNC, TNC

Length (mm/in)

Attenuation (dB)	SMA	
0~10, 12, 15, 20, 30	21.6 [0.85]	
40		25.1 [0.988]
50, 60	30 [1.181]	

Length (mm/in)

Attenuation (dB)	N	BNC
1~10, 15, 20, 30	45 [1.772]	35 [1.378]
40, 50, 60	48 [1.89]	38 [1.496]

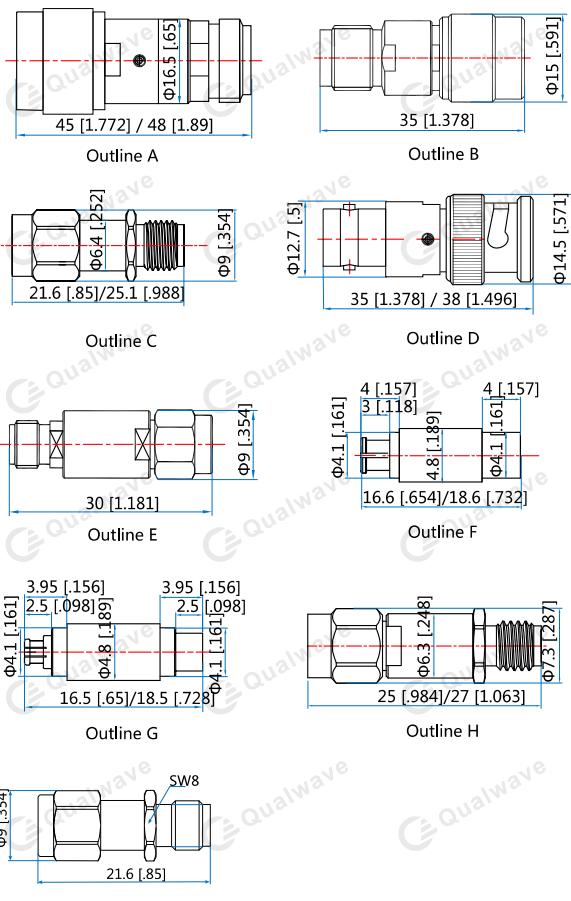
Length (mm/in)

Attenuation (dB)	SMP	SSMP	SSMA
0~10, 12, 15, 20	16.6 [.654]	16.5 [.65]	25 [0.984]
30, 40	18.6 [.732]	18.5 [.728]	27 [1.063]

Environmental

Temperature: -55~+125°C

Outline Drawings



Unit: mm [in]

Tolerance: ±2mm [± 0.08 in]

Attenuation Accuracy and VSWR (SMA)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)						VSWR (max.)
	0	1~10	12/15/20/30	40	50	60	
DC-4	-0.2/+0.2	-0.6/+0.6	-0.6/+0.6	-0.8/+0.6	0.7	0.8	1.25, 1.2@50, 60dB
DC-8	-0.2/+0.2	-0.6/+0.6	-0.6/+0.6	-0.8/+0.6	0.8	0.9	1.25
DC-12.4	-0.2/+0.3	-0.6/+0.6	-0.6/+0.6	-0.8/+0.7	1.0	1.1	1.25, 1.3@0, 40dB
DC-18	-0.2/+0.4	-0.6/+0.6	-0.6/+0.6	-0.8/+0.8	1.5	1.5	1.25, 1.3@50, 60dB, 1.35@0, 40dB

Attenuation Accuracy and VSWR (N)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)						VSWR (max.)	
	1~10	15	20	30	40	50	60	
DC-4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.2
DC-6	0.5	0.6	0.6	0.8	0.8	0.8	0.9	1.2
DC-12.4	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.3
DC-18	0.7	0.8	0.8	1.0	1.2	-	-	1.35

Attenuation Accuracy and VSWR (TNC)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)						VSWR (max.)
	1~10	11~20	21~30	40	50	60	
DC-4	0.4	0.5	0.7	0.7	0.7	0.8	1.2
DC-8	0.5	0.6	0.8	0.8	0.8	0.9	1.25
DC-12.4	0.6	0.7	0.9	0.9	1.0	1.1	1.25
DC-18	0.6	0.8	1.0	1.2	1.5	1.5	1.3

Attenuation Accuracy and VSWR (BNC)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)				VSWR (max.)
	1~7	7~20	21~30	40~60	
DC-4	0.3	0.5	0.75	0.8	1.2
DC-6	0.3	0.5	0.75	0.8	1.25

Attenuation Accuracy and VSWR(SMP/SSMP/SSMA)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)								VSWR (max.)
	0	1~6	7~10	12	15	20	30	40	
DC-18	-0.2/+0.4	-0.4/+0.6	-0.6/+0.6	-0.6/+0.6	-0.6/+0.6	-0.6/+0.6	-0.8/+0.8	-0.8/+0.8	1.35

How To Order
QFA1802-X-Y-Z

X: Frequency in GHz

Y: Attenuation in dB

Z: Connector type

Examples:

To order an attenuator, DC-18GHz, SMA male to SMA female, 30dB attenuation, specify QFA1802-18-30-S.

Connector naming rules:

N - N (Outline A)

T -TNC (Outline B)

S - SMA (Outline I - 1~10, 12, 15, 20, 30dB, Outline C -0, 40dB,

Outline E -50, 60dB)

B - BNC (Outline D)

P - SMP (Outline F)

G - SSMP (Outline G)

A - SSMA (Outline H)