

# QFA4002

## DC~40GHz, 2W

**Features:**

- \* Low VSWR
- \* High Attenuation Flatness

**Applications:**

- \* Wireless
- \* Transmitter
- \* Laboratory Test
- \* Radar

**Electrical**

Frequency:	DC~40GHz
Attenuation:	0~15, 20, 25, 30, 40, 50dB
Impedance:	50Ω
Average Power <sup>*1</sup> :	2W@25°C max.
Peak Power <sup>*2</sup> :	20W

[1] Derated linearly to 0.5W@125°C.  
 [2] Pulse width: 5us, duty cycle: 1%.

**Mechanical**

RF Connectors:	2.92mm, SMP, SSMP, SSMA
Outer Conductor:	Passivated stainless steel/ Gold plated brass/Gold plated beryllium copper
Dielectric:	PEI/PTFE
Inner Conductor:	Gold plated brass/Gold plated beryllium copper

**Length (mm/in)**

Attenuation (dB)	2.92mm
0	21.9 [.862]
1~30	17.2 [.677]
40	23.9 [.941]
50	49 [1.929]

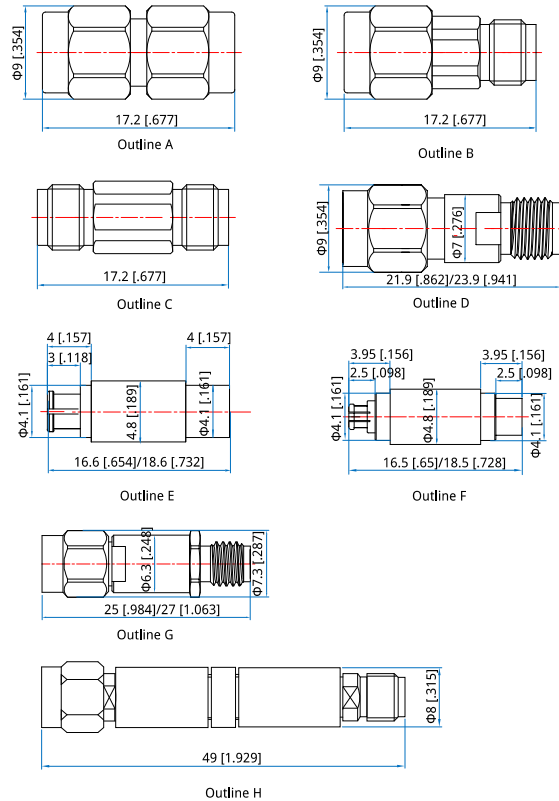
**Length (mm/in)**

Attenuation (dB)	SMP	SSMP	SSMA
0~10, 12, 15, 20	16.6 [.654]	16.5 [.65]	25 [.984]
30, 40	18.6 [.732]	18.5 [.728]	27 [1.063]

**Environmental**

Temperature: -55~+125°C

**Outline Drawings**



Unit: mm [in]  
 Tolerance:  $\pm 0.2\text{mm}$  [ $\pm 0.008\text{in}$ ]

**Attenuation Accuracy and VSWR(2.92mm)**

Frequency (GHz)	Attenuation Accuracy ( $\pm$ dB) vs. Attenuation (dB)							VSWR (max.)
	0	1~3	4~15	20/25	30	40	50	
DC~40	-0.2/+0.8	$\pm 0.6$	$\pm 0.7$	$\pm 0.8$	$\pm 1$	-1.0/+1.0	-1.0/+2.0	1.25, 1.35@0, 40dB, 1.4@50dB

**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~40	-0.2/+0.8	-0.4/+1.0	-0.6/+1.0	-0.6/+1.0	-0.6/+1.0	-0.6/+1.0	-1.2/+1.2	-1.2/+1.2	1.45

### How To Order

#### QFA4002-X-Y-Z

X: Frequency in GHz

Y: Attenuation in dB

Z: Connector type

KFKF - Outline C

P - SMP (Outline E)

G - SSMP (Outline F)

A - SSMA (Outline G)

#### Examples:

To order an attenuator, DC~40GHz, 2.92mm male to 2.92mm female, 3dB attenuation, specify QFA4002-40-3-K.

#### Connector naming rules:

K - 2.92mm

KK - Outline A

K - (Outline B -1 ~ 30dB, Outline D - 0, 40dB, Outline H - 50dB)