



# WFA4002

## 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\*1: 2W@25°C max.

[1] Derated linearly to 0.5W@125°C.

### 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

### Environmental

Temperature: -55~+125°C

### Length (mm/in)

Attenuation (dB)	2.92mm
0	21.9 [.862]
1~30	17.2 [.677]
40	47.6 [1.874]
50	49 [1.929]

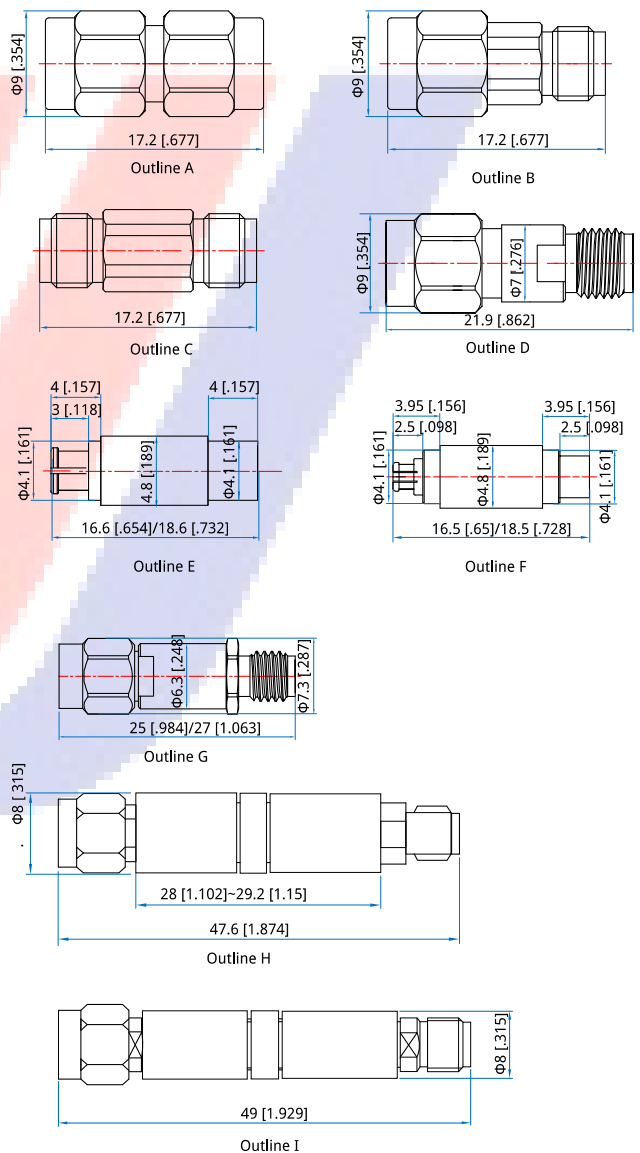
### Length (mm/in)

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

### Peak Power

Peak Power (W)	Pulse Width (μs)	Duty Cycle (%)	Applicable Scope
20	5	1	2.92mm(1~30dB), SMP, SSMP, SSMA
200		1	2.92mm(40, 50dB)

### 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/+2.0	-1.0/+2.0	1.25, 1.35@0dB, 1.4@40, 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	
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	1.45

**How To Order**

**WFA4002-X-Y-Z**

X: Frequency in GHz

Y: Attenuation in dB

Z: Connector type

**Examples:**

To order an attenuator,  
DC~40GHz, 2.92mm male to 2.92mm female, 3dB attenuation,  
specify WFA4002-40-3-K.

**Connector naming rules:**

K - 2.92mm

KK - Outline A

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

KFKF - Outline C

P - SMP (Outline E)

G - SSMP (Outline F)

A - SSMA (Outline G)

