

# FFA5002

## DC~50GHz, 2W

Features:  
 \* Low VSWR  
 \* High Attenuation Flatness

Applications:  
 \* Wireless  
 \* Transmitter  
 \* Laboratory Test  
 \* Radar

### Electrical

Frequency: DC~50GHz  
 Attenuation: 0~10, 12, 15, 20, 30, 40, 50dB  
 Impedance: 50Ω  
 Average Power\*<sup>1</sup>: 2W@25°C max.  
 Peak Power: 200W (5μS pulse width, 1% duty cycle) @40, 50dB  
 20W (5μS pulse width, 1% duty cycle) @30dB

[1] Derated linearly to 0.2W@125°C.@40, 50dB

[2] Derated linearly to 0.5W@125°C.@30dB

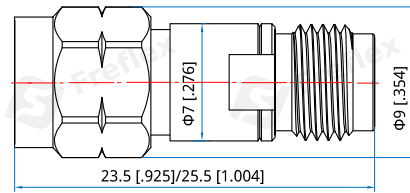
### Mechanical

RF Connectors: 2.4mm  
 Dielectric: PEI  
 Outer Conductor: Passivated stainless steel/  
 Nickel plated brass  
 Male Inner Conductor: Gold plated brass/Gold plated  
 beryllium copper

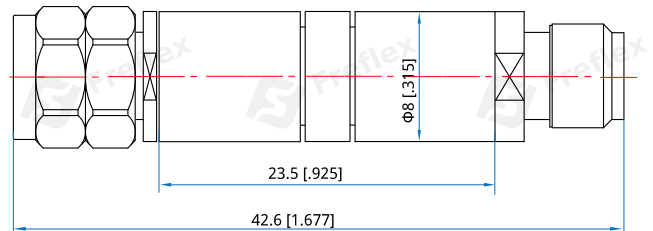
### Environmental

Temperature: -55~+125°C

### Outline Drawings



Outline A



Outline B

Unit: mm [in]

Tolerance: ±2mm [±0.08in]

Attenuation (dB)	Length (mm [in])
0~10, 12, 15, 20	23.5 [0.925]
30	25.5 [1.004]
40, 50	42.6 [1.677]

### Attenuation Accuracy and VSWR

Frequency (GHz)	Attenuation Accuracy (±dB) vs. Attenuation (dB)									VSWR (max.)
	0	1~10	12	15	20	30	40	50		
DC~50	-0.2/+1.0	-1.0/+1.0	-1.0/+1.0	-1.0/+1.0	-1.0/+1.0	-1.0/+1.2	±1.5	±1.5		1.3@30dB, 1.4, 1.45@40dB, 50dB

### How To Order

#### FFA5002-X-Y-Z

X: Frequency in GHz

Y: Attenuation in dB

(Outline A - 0~10, 12, 15, 20, 30dB, Outline B - 40, 50dB)

Z: Connector type

Connector naming rules:

2 - 2.4mm

Examples:

To order an attenuator, DC~50GHz, 2.4mm male to 2.4mm female, 20dB attenuation, specify FFA5002-50-20-2.