

Waveguide WR28 Attenuator 26.5GHz–40GHz



Note: The photo is for illustration purposes only.
Please refer to the outline drawing.

Product Description

RFWAT28W050 is a waveguide WR28 fixed attenuator with a frequency range of 26.5 to 40GHz.

The attenuator's maximum average power is 50W. The attenuation value can be from 1 to 50dB.

The waveguide type is WR28.

Features

- Waveguide Attenuator
- 50W Power Handling
- Low VSWR

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications ($T_A=+25^{\circ}\text{C}$)

Parameter	Min	Typ	Max	Units
Frequency Range		26.5-40		GHz
VSWR		1.20		: 1
Attenuation		1-50		dB
Accuracy		± 1.0		dB
Power Handling (CW)		50		W
Peak Power (8us pulse)		1		KW
Waveguide Type		WR28		
Flange Type		CPRG, CPRF, COVER, CHOKE available		
Flange Holes		Through		

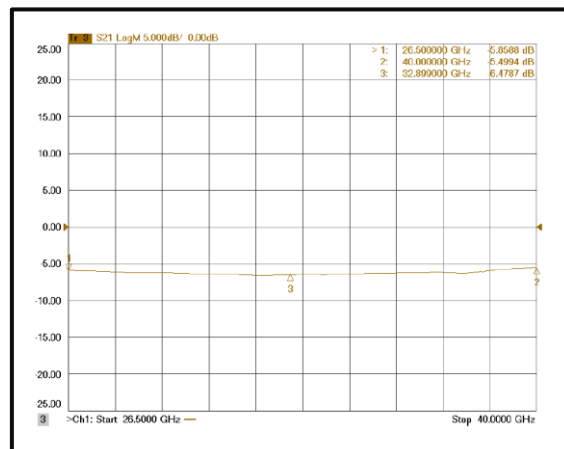
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-60°C to +125°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
*Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +70°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

*For vibration testing details please see additional information section.

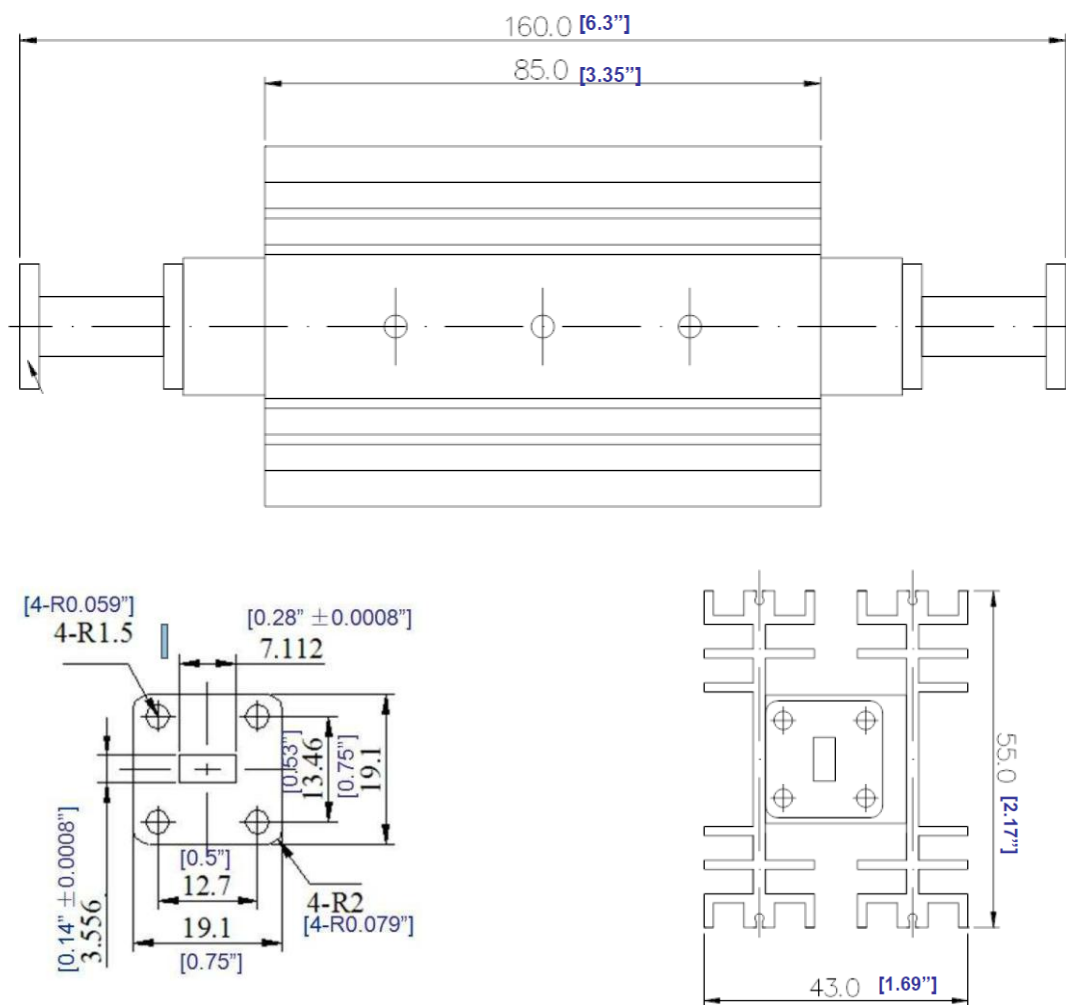
Typical Performance Plots

Pattern



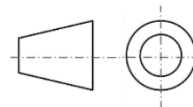
Outline Drawing

Mechanical Size can change slightly depending on the attenuation value



Notes:

1. Material: Alloyed Cuprum
2. Finish: Silver Plated chromate or conversion
3. All dimensions are in millimeters [inches].



Additional Information

Documentation

Webpage

ESD Policy

https://rflambda.com/pdf/rflambda_esd_control.pdf

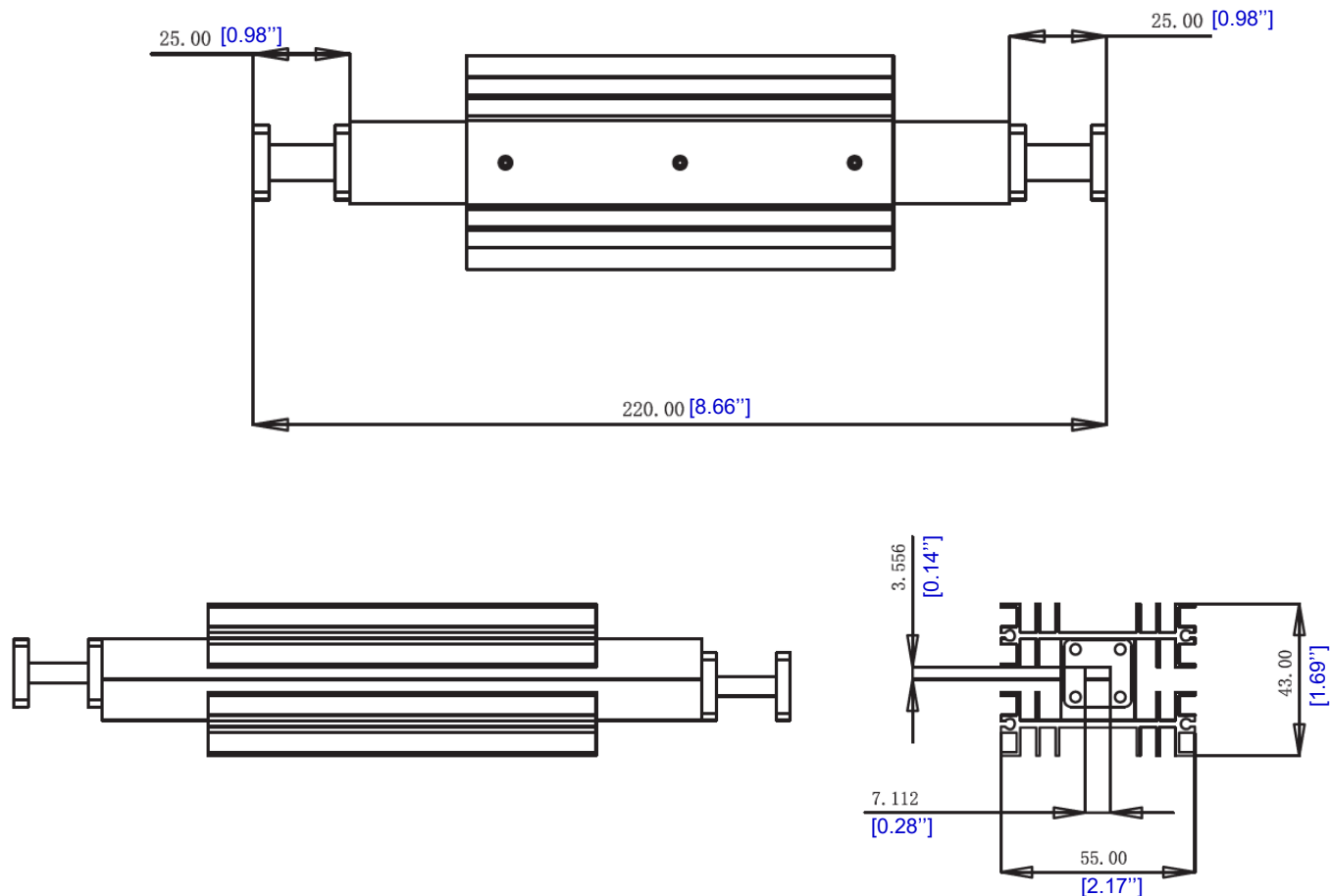
Connector Torque Specifications

https://www.rflambda.com/pdf/Torque_Specifications.pdf

Random Vibration Test Standard

https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

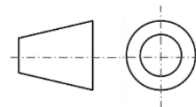
Outline Drawing



RFWAT28W050-03 3dB Version Shown

Notes:

1. Material: Alloyed Cuprum
2. Finish: Silver Plated chromate or conversion
3. All dimensions are in millimeters [inches].



Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFWAT28W050	WR28	26.5GHz-40GHz Waveguide Attenuator

Important Notice

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