

50W Coaxial Fixed Attenuator DC-1GHz



Product Description

RFS50G1A is a coaxial fixed attenuator with a frequency range of DC to 1GHz.

The max average power of the attenuator is 50W. The max VSWR of 1.15:1.

The working temperature of this product is between - 40°C and + 85°C.

Features

- Wide frequency Band
- Low VSWR
- Multiple Attenuation Values Available

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°C)

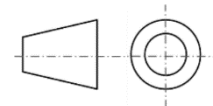
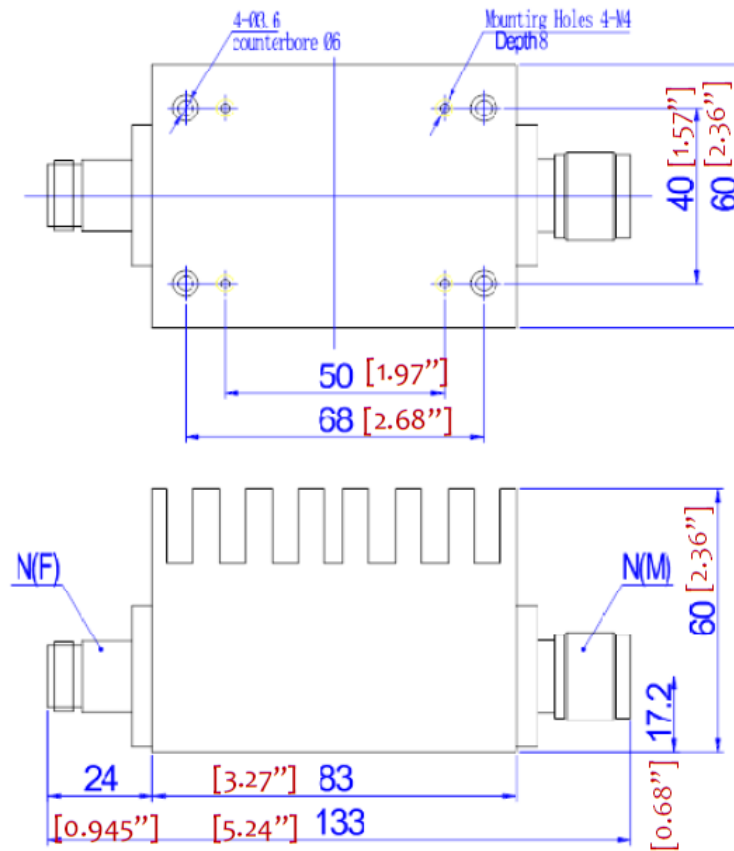
Parameter	Min	Typ	Max	Units
Frequency Range	DC		1	GHz
Attenuation Value & Accuracy	1~9	±0.4		
	10	±0.3		
	20	±0.3		dB
	30	±0.3		
	40~50	±0.3		
VSWR			1.15	: 1
Average Power			50	W
Peak Power (0.5% Duty Cycle, 5us Pulse Width)			10	KW
Impedance		50		Ω
Weight		1.13 Max.		lbs.
Connectors		N ,SMA,TNC,BNC,7/16		

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-55°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 +125°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.

Outline Drawing



Notes:

1. Finish: Body painted with gray/black epoxy enamel
2. All dimensions are in millimeters [inches].
3. Tolerances ± 0.25 [0.01] unless otherwise specified.



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
RFS50G1A	N ,SMA,TNC,BNC,7/16	DC-1GHz Fixed Attenuator

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