

20W Coaxial Fixed Attenuator DC-40GHz



Product Description

The RFS20G40B is a coaxial fixed attenuator with a frequency range of DC to 40GHz.

The max average power of the attenuator is 20W. The max VSWR of 1.4:1.

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 | | 40 | GHz |
| Attenuation Accuracy | 40 | -1.0/+2.0 | | dB |
| VSWR | | | 1.4 | : 1 |
| Average Power | | | 20 | W |
| Peak Power (5us 0.5%) | | | 0.2 | KW |
| IM3 | -100dBc 3dB back off 1MHz step | | | |
| Weight | | 0.22 | | lbs. |
| Input / Output Connectors | 2.92mm-Male (Input) – 2.92-Female (Output) | | | |

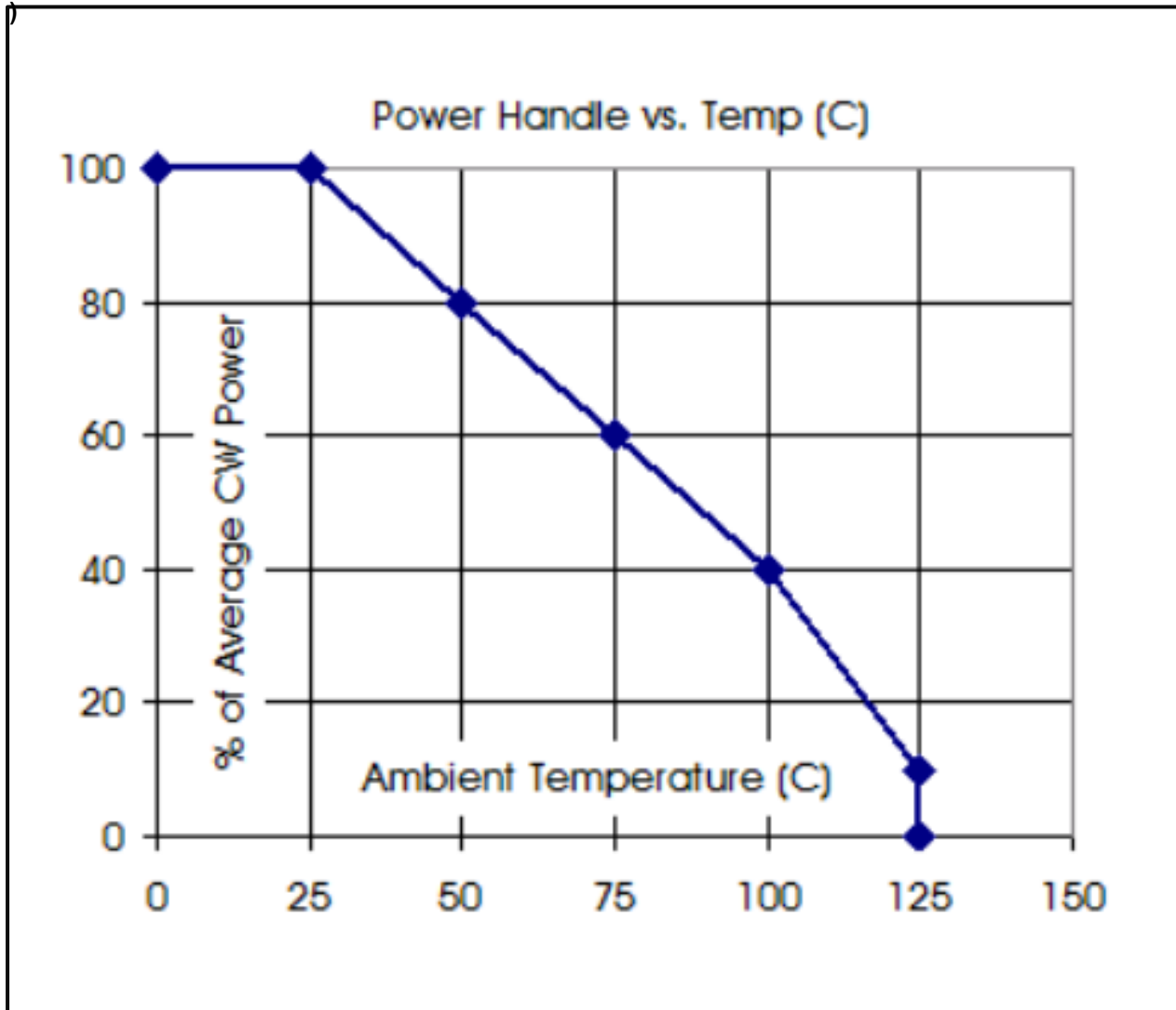
Environmental Specifications and Test Standards

| 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 +85°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) |

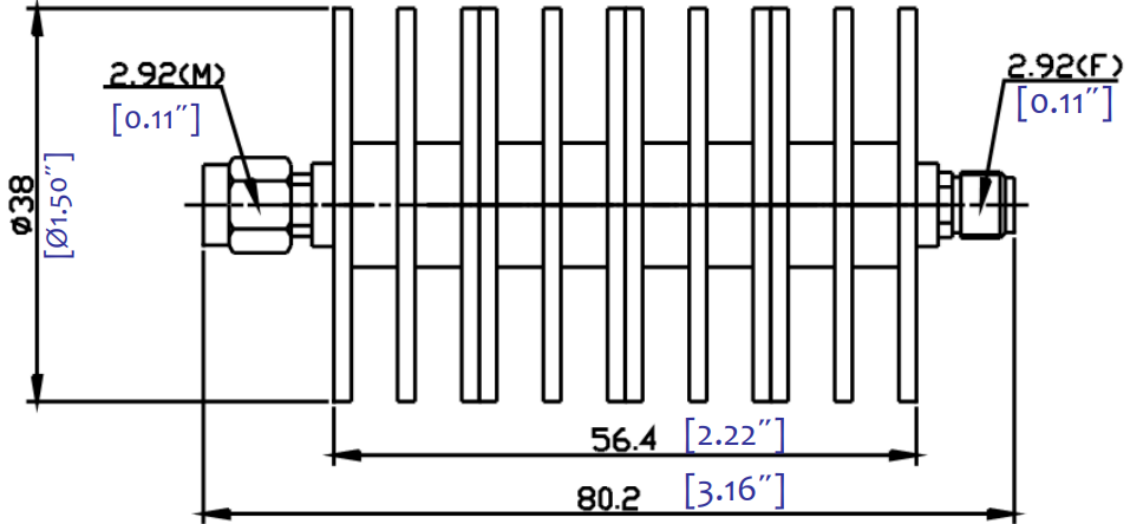
**For vibration testing details please see additional information section.

Typical Performance Plots

Power Handling Derating vs. Temp(°C)

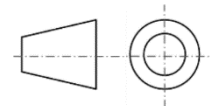


Outline Drawing



Notes:

1. Package Material: Aluminum / Copper
2. Finish: Body painted with gray/black epoxy enamel
3. All dimensions are in millimeters [inches].
4. 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 |
|-------------|---|---------------------------|
| RFS20G40B | Input connector 2.92mm-Male and Output connector 2.92-Female | DC-40GHz Fixed Attenuator |

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