

## 50W Coaxial Fixed Attenuator DC-2GHz



### Product Description

RFS50G2A is a coaxial fixed attenuator with a frequency range of DC to 2GHz.

The max average power of the attenuator is 50W. The max VSWR of 1.25:1.

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<sub>A</sub>=+25°C)

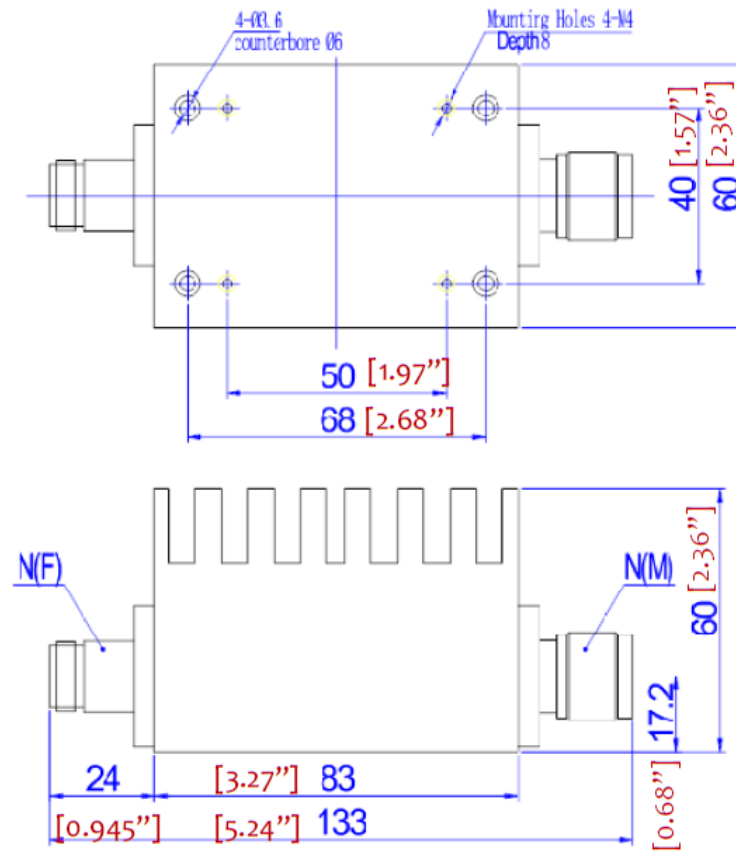
| Parameter                                     | Min   | Typ                 | Max  | Units |
|-----------------------------------------------|-------|---------------------|------|-------|
| Frequency Range                               | DC    |                     | 2    | GHz   |
| Attenuation Value & Accuracy                  | 1~9   | ±0.5                |      |       |
|                                               | 10    | ±0.4                |      |       |
|                                               | 20    | ±0.4                |      | dB    |
|                                               | 30    | ±0.5                |      |       |
|                                               | 40~50 | ±0.6                |      |       |
| VSWR                                          |       |                     | 1.25 | : 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<br>(Case Temperature)                                                                                                                                                                            |
| Storage Temperature               | -55°C to +125°C                                                                                                                                                                                                 |
| Thermal Shock                     | -40°C → +85°C<br>(5 Cycles / 10 hours)                                                                                                                                                                          |
| **Random Vibration                | MIL-STD-202G<br>Table 214-I, Test Condition Letter C<br>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<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude                          | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)                                                                                             |
| Hermetically Sealed<br>(Optional) | MIL-STD-883 (For Hermetically Sealed Units)                                                                                                                                                                     |

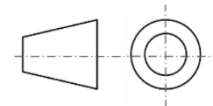
\*\*For vibration testing details please see additional information section.

**Outline Drawing**



Notes:

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



Additional Information

| Documentation                   | Webpage                                                                                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESD Policy                      | <a href="https://rflambda.com/pdf/rflambda_esd_control.pdf">https://rflambda.com/pdf/rflambda_esd_control.pdf</a>                                             |
| Connector Torque Specifications | <a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>                                   |
| Random Vibration Test Standard  | <a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a> |

**Ordering Information**

| Part Number | Modification        | Description              |
|-------------|---------------------|--------------------------|
| RFS50G2A    | N ,SMA,TNC,BNC,7/16 | DC-2GHz Fixed Attenuator |

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