

5000W Coaxial Fixed Attenuator 2GHz - 18GHz



Product Description

The RFS500G2G18 is a coaxial fixed attenuator with a frequency range of 2 to 18GHz.

The max average power of the attenuator is 500W. The max VSWR of 1.8:1.

The working temperature of this product is between - 20°C and + 70°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)

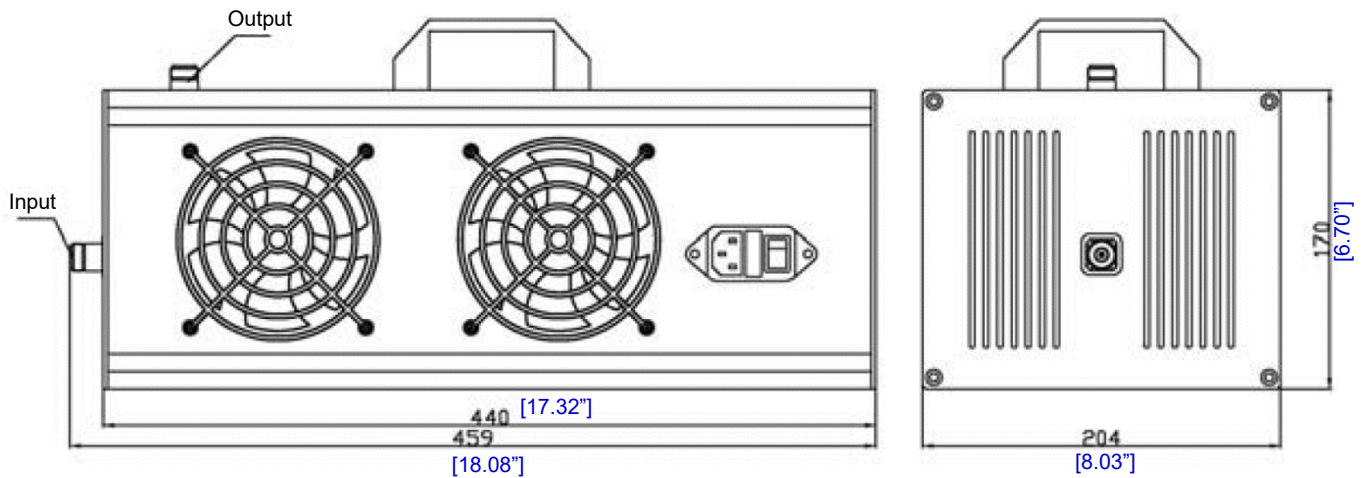
| Parameter | Min | Typ | Max | Units |
|--|--------------------------------------|------------|-----|-------|
| Frequency Range | 2 | | 18 | GHz |
| Attenuation Value & Accuracy | 40 | ±2.0 | | dB |
| VSWR | | | 1.8 | : 1 |
| Average Power | | | 500 | W |
| Peak Power (3μs pulse width with 10% duty cycle) | | | 5 | KW |
| Impedance | | 50 | | Ω |
| Weight | | 19.85 Max. | | lbs. |
| Input / Output Connectors | N-Female (Input) – N-Female (Output) | | | |
| Connectors | Brass Nickel Plated | | | |
| Male Pin | Brass Gold Plated | | | |
| Female Pin | Beryllium Copper Gold Plated | | | |

Environmental Specifications and Test Standards

| Parameter | Description |
|-----------------------------------|---|
| Operational Temperature | -20°C to +70°C (Case Temperature) |
| Storage Temperature | -55°C to +125°C |
| Thermal Shock | -20°C → +70°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. Package Material: Aluminum
2. Finish: Black Anodized
3. All dimensions are in millimeters [inches].
4. Dimensions Tolerance $\pm 3\%$.

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 |
|-------------|---|-----------------------------|
| RFS500G2G18 | Input connector N-Female and Output connector N-Female | 2GHz-18GHz Fixed Attenuator |

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