

## 200W Coaxial Fixed Embedded Attenuator DC-8GHz



Note: Photo is for illustration purposes only. Please refer to outline drawing.

### Product Description

RFSB200G08 is an embedded attenuator with a frequency range of DC to 8GHz.

The max average power of the attenuator is 200W. The max VSWR of 1.35:1.

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)

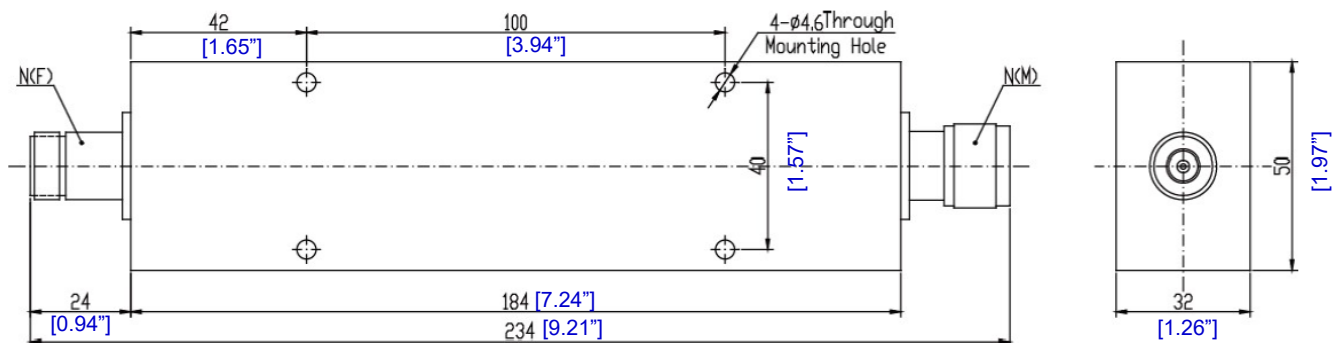
| Parameter                                       | Min | Typ                          | Max  | Units |
|-------------------------------------------------|-----|------------------------------|------|-------|
| Frequency Range                                 | DC  |                              | 8    | GHz   |
| Attenuation Value & Accuracy                    | 20  | ±1.0                         |      | dB    |
|                                                 | 30  | ±0.75                        |      |       |
|                                                 | 40  | ±0.75                        |      |       |
| VSWR                                            |     |                              | 1.35 | : 1   |
| Average Power                                   |     |                              | 200  | W     |
| Peak Power (5μs pulse width with 4% duty cycle) |     |                              | 5    | KW    |
| Impedance                                       |     | 50                           |      | Ω     |
| Weight                                          |     | 1.9 Max.                     |      | lbs.  |
| Connectors                                      |     | N, SMA                       |      |       |
| Male Pin                                        |     | Brass Gold Plated            |      |       |
| Female Pin                                      |     | Beryllium Copper Gold Plated |      |       |

## 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)                                                                                                                                                                     |

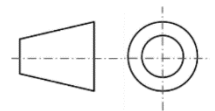
\*\*For vibration testing details please see additional information section.

**Outline Drawing**



**Notes:**

1. Connectors: Nickel Plated Brass
2. Housing: Aluminum.
3. All dimensions are in millimeters [inches].
4. Standard torque wrench must be used to secure RF connectors.



**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                 |
|-------------|--------------|-----------------------------|
| RFSB200G08  | N, SMA       | DC-8GHz Embedded Attenuator |

## Important Notice

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