

## 20W Coaxial Fixed Attenuator DC-40GHz



### Product Description

The RFS20G40D 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<sub>A</sub>=+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	2.4mm-Male (Input) – 2.4-Female (Output)			

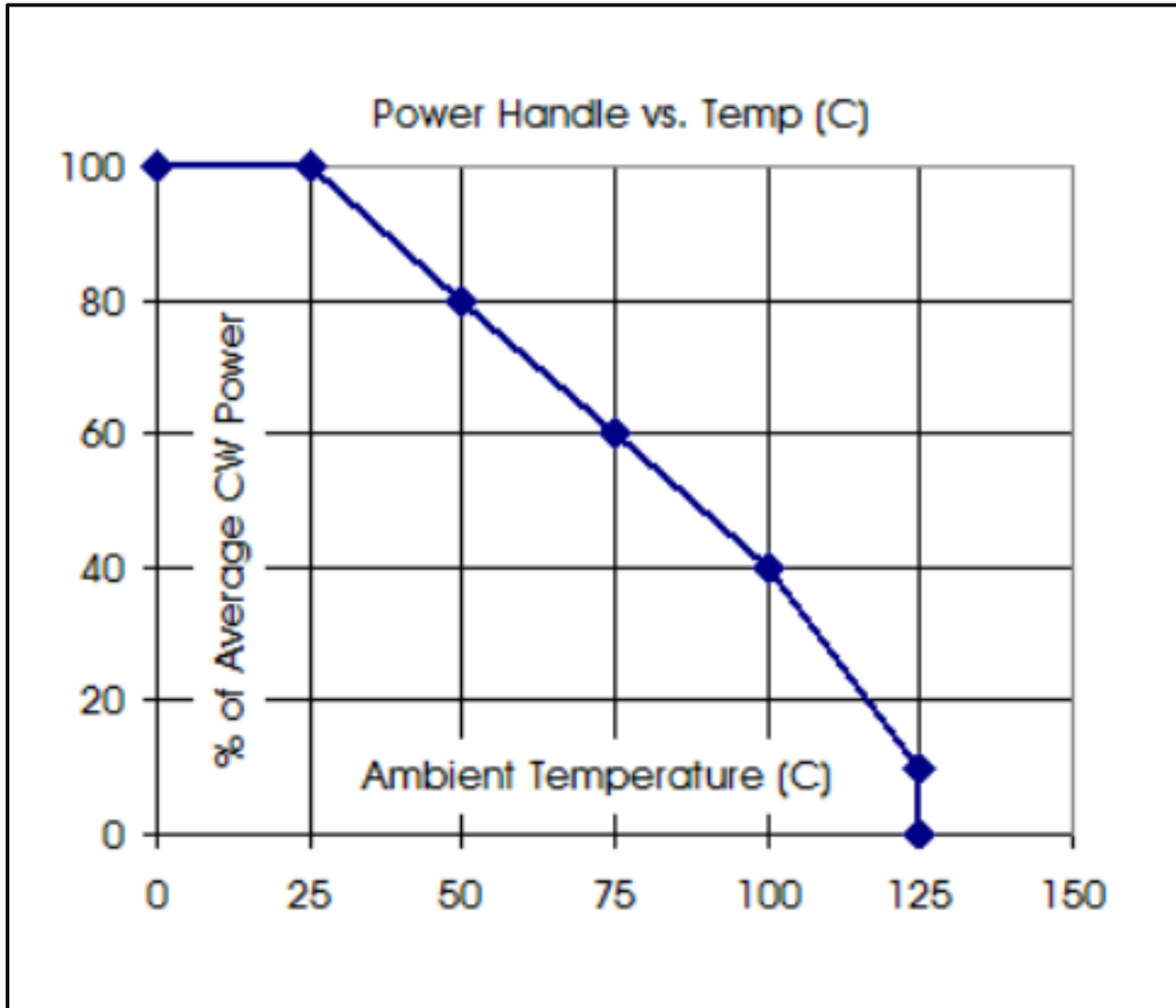
**Environmental Specifications and Test Standards**

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)

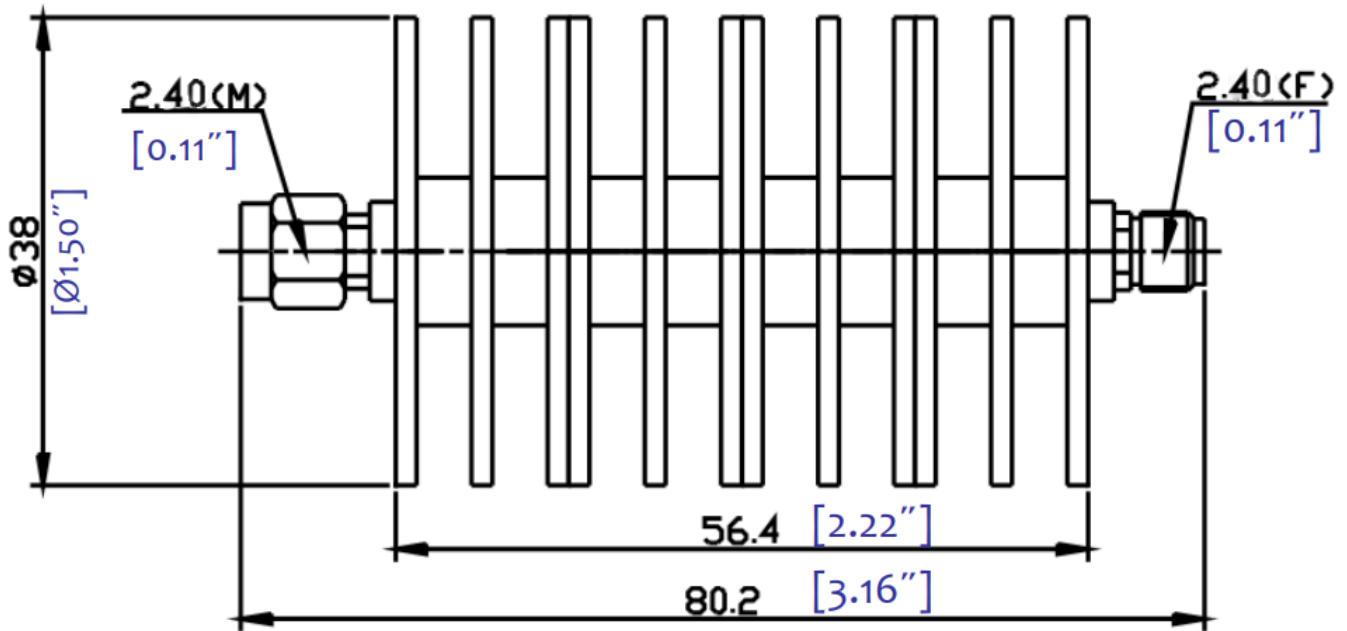
\*\*For vibration testing details please see additional information section.

Typical Performance Plots

Power Handling Derating vs. Temp(°C)

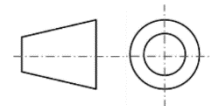


**Outline Drawing**



Notes:

1. Package Material: Aluminum / Copper
2. Finish: Body painted with gray/black epoxy enamel
3. All dimensions are in millimeters [inches].
4. Tolerances  $\pm 0.25$  [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
RFS20G40D	Input connector 2.4mm-Male and Output connector 2.4-Female	DC-40GHz Fixed Attenuator

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