

5W Coaxial Fixed Attenuator DC-18GHz



Product Description

RFS5G18B is a coaxial fixed attenuator with a frequency range of DC to 18GHz.

The max average power of the attenuator is 5W. The max VSWR of 1.30:1.

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)

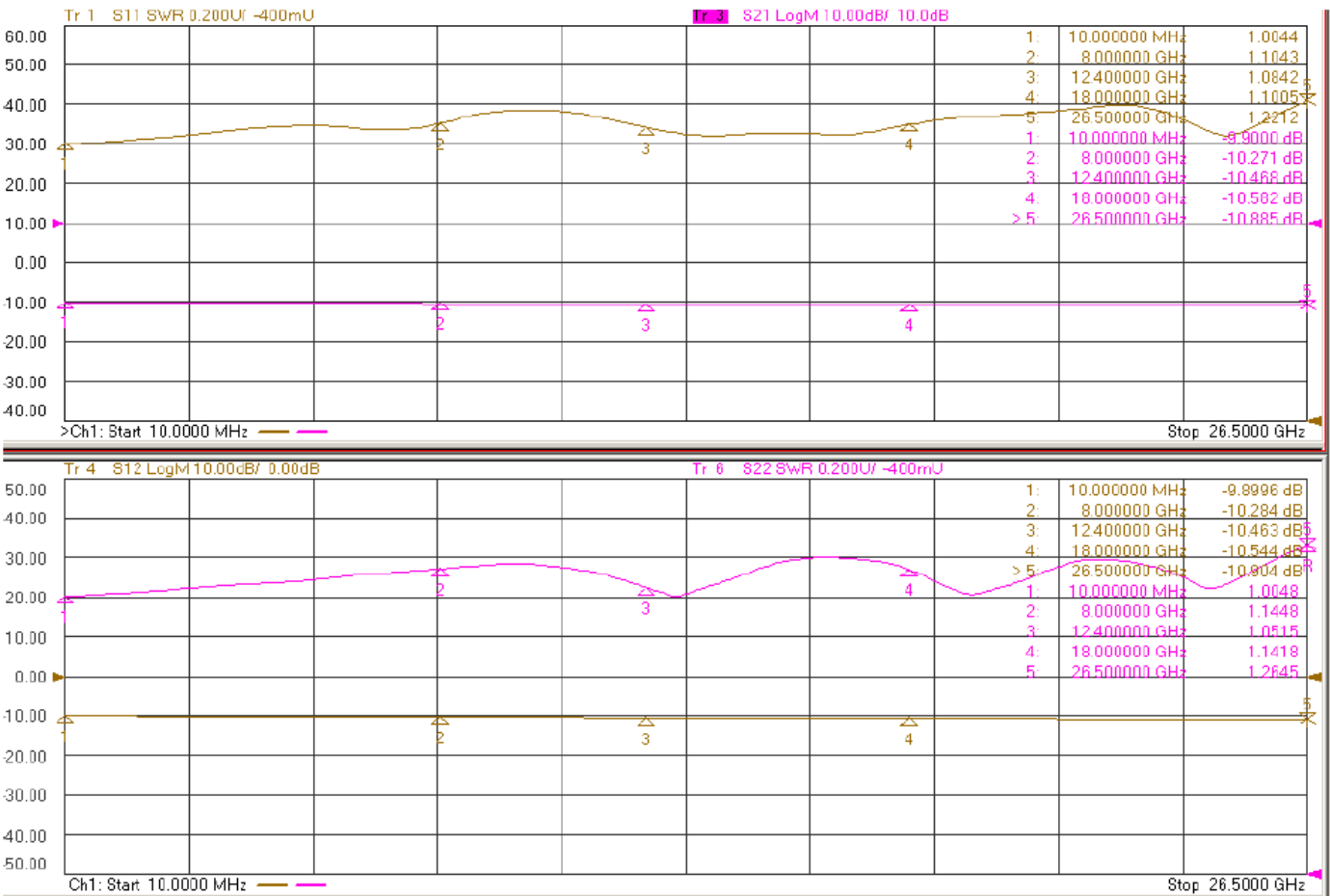
Parameter	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Attenuation Value & Accuracy	3	-0.5/+0.8		dB
	6	-0.5/+0.8		
	10	±1.0		
	20	±1.0		
	30	±1.0		
	40	±1.0		
	50	±1.0		
VSWR			1.30	: 1
Average Power			5	W
Peak Power (1% Duty Cycle, 5µs Pulse Width)			0.5	KW
Impedance		50		Ω
Weight		0.03 Max.		lbs.
Connectors		SMA (M,F)		

Environmental Specifications and Test Standards

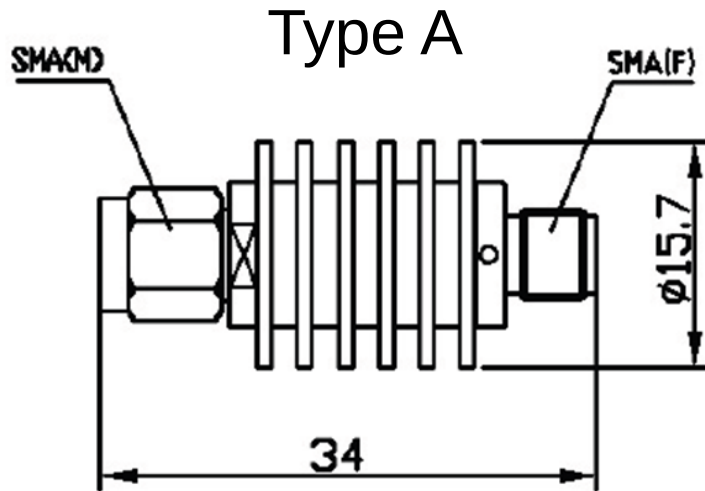
Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-55°C to +125°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +125°C for 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.

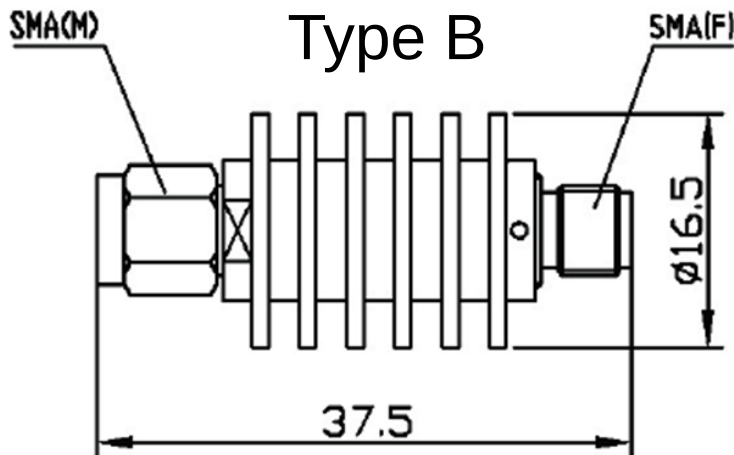
Typical Performance Plots



Outline Drawing



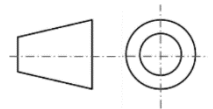
Up to 30dB



40dB and 50dB

Notes:

1. Connectors: Brass Nickel Plated.
2. Male Pin: Brass Gold Plated, Female Pin: Beryllium Copper Gold Plated.
3. Housing: Aluminum, Black Anodize.
4. All dimensions are in millimeters.
5. Tolerances ± 0.1 [0.004] 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
RFS5G18B	SMA (M,F)	DC-18GHz Coaxial Fixed Attenuator

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