

Waveguide High Power Attenuator 7.5GHz–18GHz



Note: The photo is for illustration purposes only.
Please refer to the outline drawing.

Product Description

RFWAT750W500-40 is a WRD750 waveguide high power attenuator frequency range of 7.5 to 18GHz.

The attenuator's power handling is 500W CW. The attenuation range is 40dB with an attenuation accuracy of 1.5dB.

The input is WRD750 and the output is SMA-Female.

Features

- Waveguide Attenuator
- High Power

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

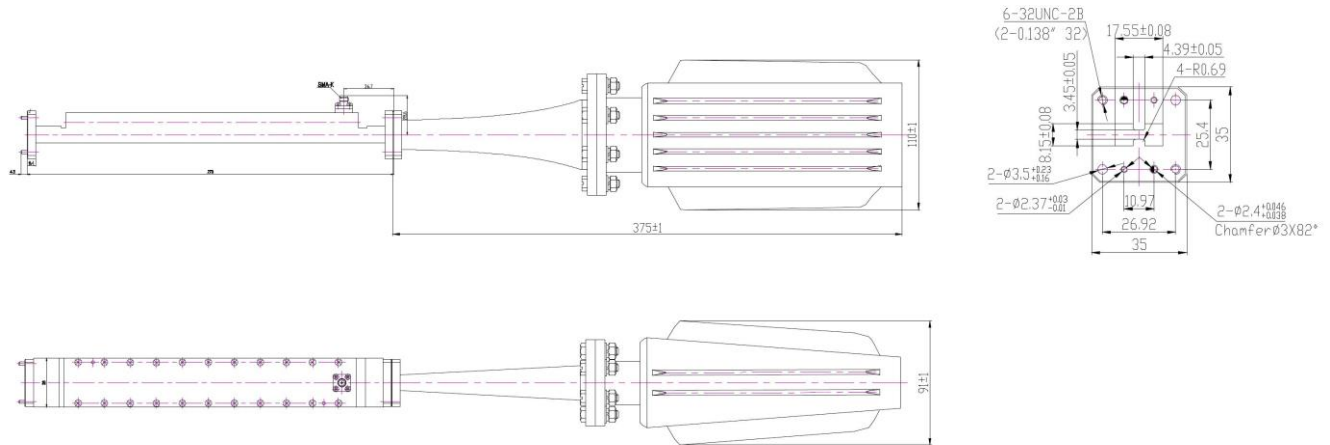
Electrical Specifications ($T_A=+25^{\circ}\text{C}$)

Parameter	Min	Typ	Max	Units
Frequency Range		7.5 – 18		GHz
Primary VSWR			1.25	: 1
Secondary VSWR			1.8	: 1
Attenuation		40		dB
Accuracy		± 1.5		dB
Power Handling (CW)			500	W
Output Connector Type		SMA-Female		
Input Waveguide Type		WRD750		
Package		Epoxy Sealed (Standard)		

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)

Outline Drawing



Notes:

1. Package Material: Copper/Aluminum
2. Inside Finish : Silver plating/Chromate conversion; Outside Finish: Corrosion protected with grey paint
3. All dimensions are in millimeters [inches].



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
RFWAT750W500-40	Input WRD750 Output Connector SMA-Female	7.5GHz-18GHz Waveguide High Power Attenuator

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