

Dual Ridged Straight Waveguide Adapter 18GHz-26.5GHz

Product Description

RFWTRWRD180WR42 is a waveguide adapter with a frequency range of 18 to 26.5GHz.

The insertion loss of this adapter is 0.5dB.

The working temperature of this product is between - 45°C and + 85°C.



Features

- Full band operation
- Low VSWR
- Rugged mechanical configuration

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, TA = +25°C

Parameter	Min	Typ	Max	Units
Frequency Range	18		26.5	GHz
VSWR			1.25	: 1
Insertion Loss			0.5	dB
Flange Type	Cover			
Waveguide Type	WRD180 to WR42			
Weight	/			
				lbs

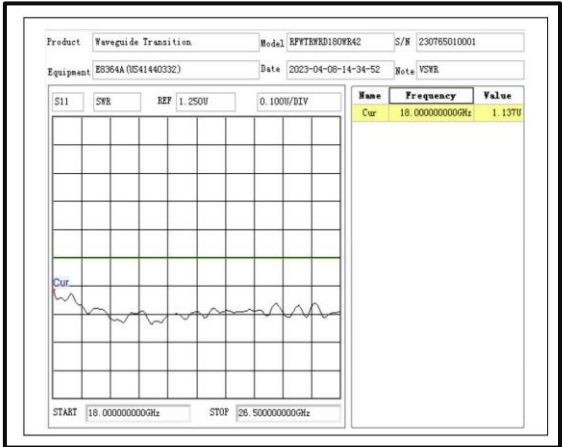
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-45°C to +85°C (Case Temperature)
Storage Temperature	-55°C to +125°C
Thermal Shock	-45°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)

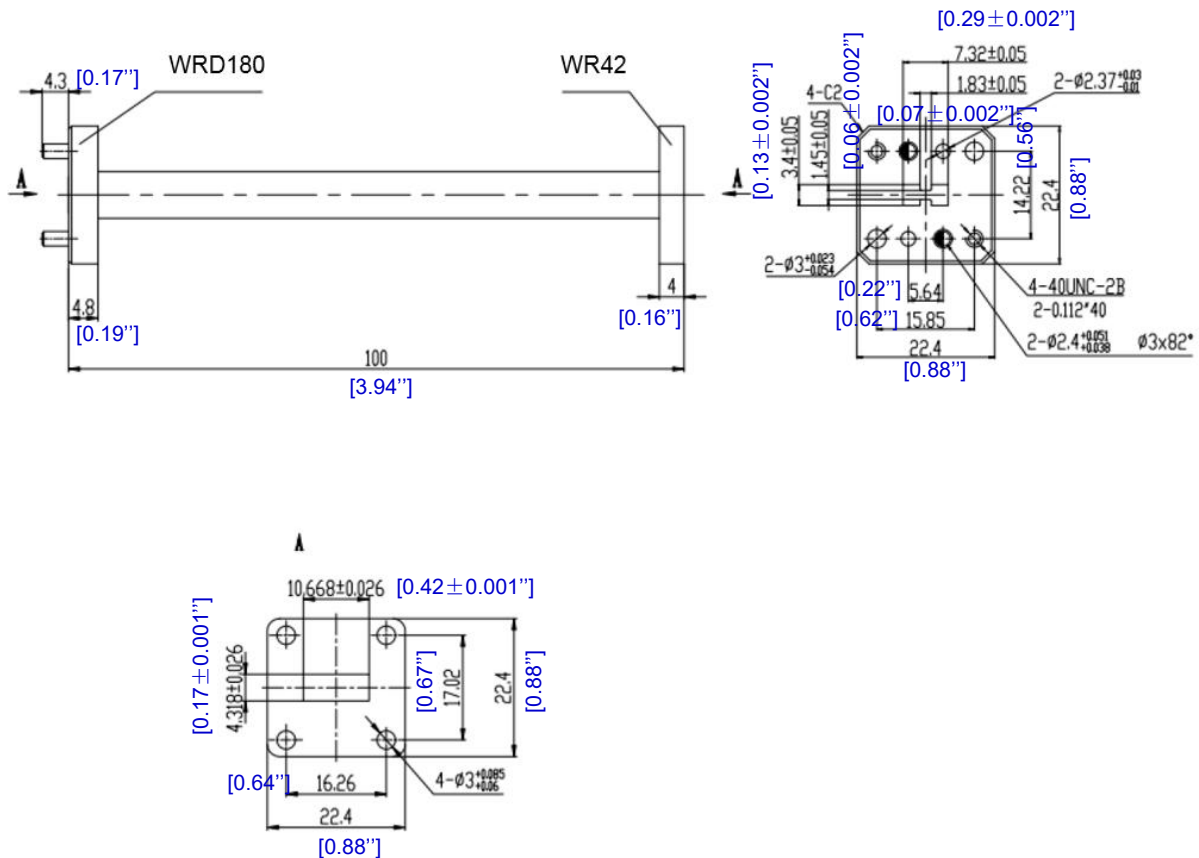
**For vibration testing details please see additional information section.

Typical Performance Plots

VSWR



Outline Drawing



Notes:

1. Material: Aluminum
2. Inside Finish: Chromate conversion; Outside Finish: Anticorrosion grey paint
3. All dimensions are in millimeters [inches].
4. The tolerance noted is just for reference.

Additional Information

Documentation	Webpage
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
RFWTRWRD180WR42	WRD180 to WR42	18GHz-26.5GHz Waveguide Adapter

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