

WRD180 Dual Ridged Straight Waveguide 18GHz-40GHz



Product Description

RFWTWWRD180C24 is a dual ridged straight waveguide with a frequency range of 18 to 40GHz.

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

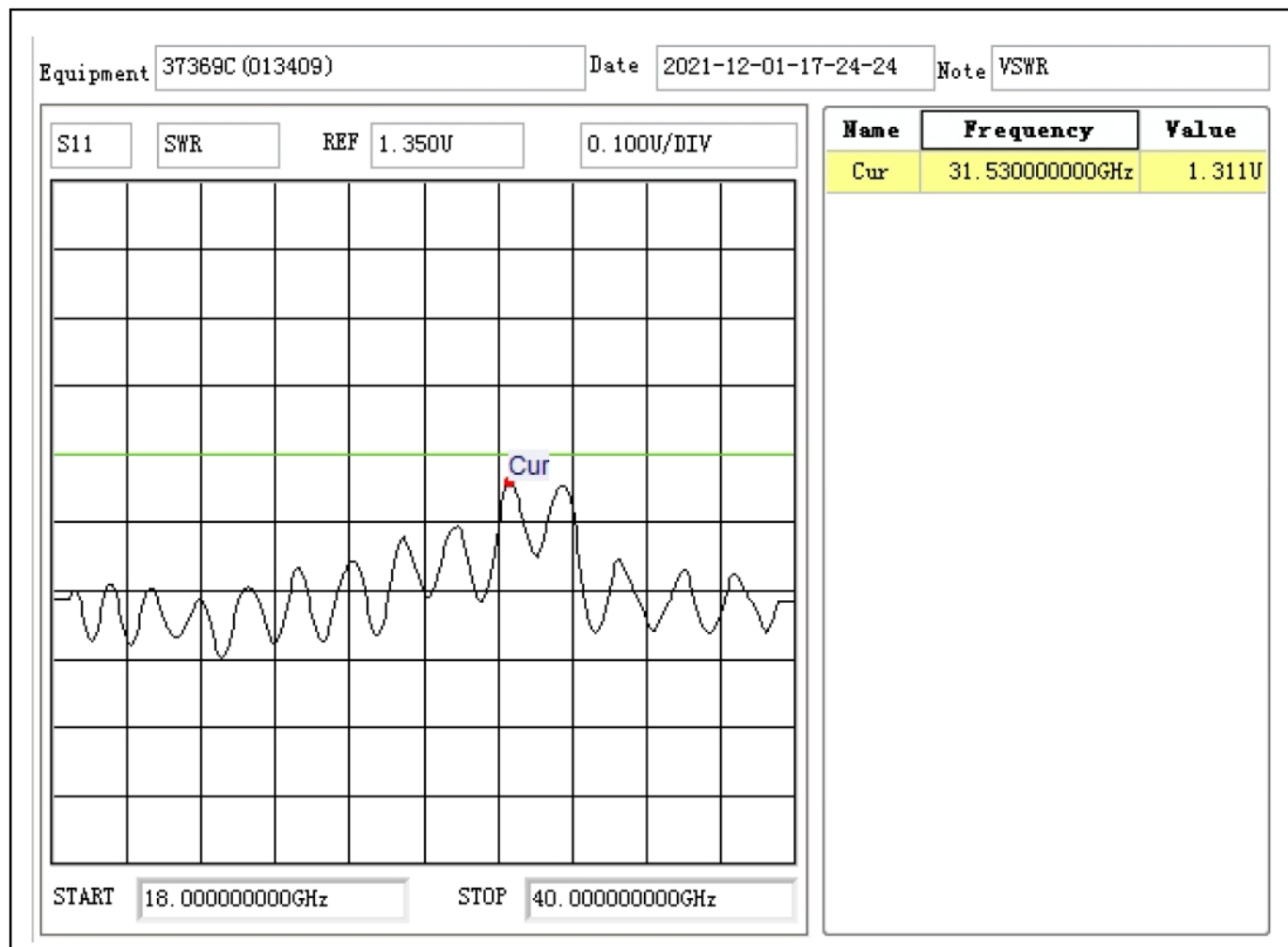
Parameter	Min	Typ	Max	Units
Frequency Range	18		40	GHz
VSWR			1.35	: 1
Insertion Loss		0.5		dB
Waveguide type		WRD180		
Flange type		WRD180C24		

Environmental Specifications and Test Standards

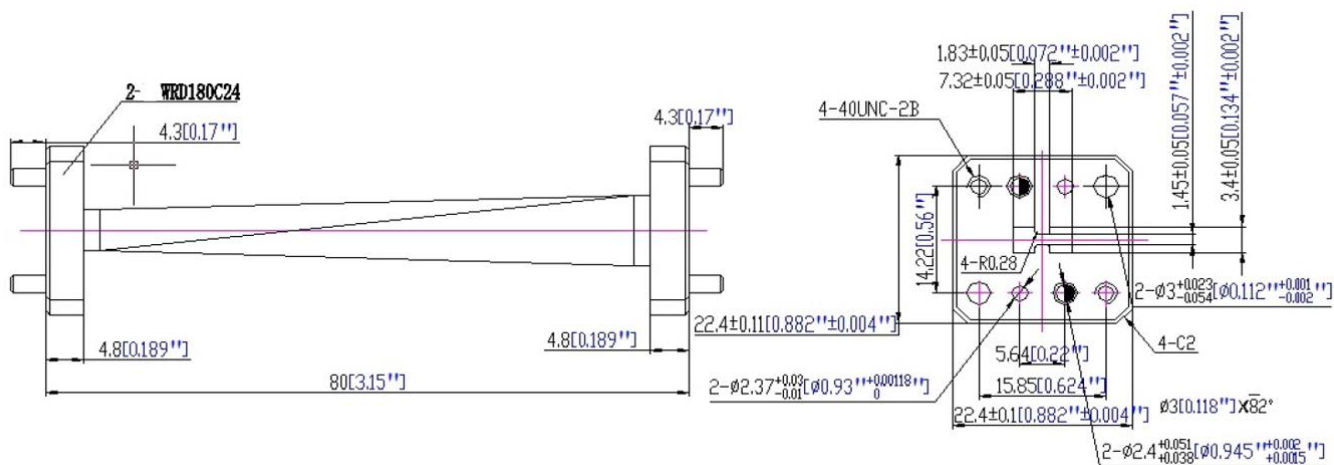
Parameter	Description
Operational Temperature	-45°C to +85°C (Case Temperature)
Storage Temperature	-55°C to +125°C
Thermal Shock	-45°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for 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

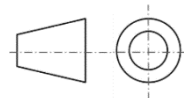


Outline Drawing



Notes:

1. All dimensions are in millimeters [inches].



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
RFWTWWRD180C24	WRD180	18GHz-40GHz Dual Ridged Straight Waveguide

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