

WR51 Flexible Twistable Waveguide 15GHz-22GHz



Product Description

RFWF51-12Inch is a flexible twistable waveguide with a frequency range of 15 to 22GHz.

Flex waveguides allow for different placements of rigid waveguide components.

Features

- Used in applications requiring both bending and twisting of the waveguides.

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		15 - 22		GHz
Insertion Loss		1.20		dB
VSWR			1.20	:1
Max Twist			365	deg/m
Power Handling (CW)		0.50		KW
Peak Power Handling		0.10		MW
* Length		300 +/- 3%		mm
Waveguide Type		WR51		
Flange Type		CPRG, CPRF, COVER, CHOKE available		
Flange Holes		Through		

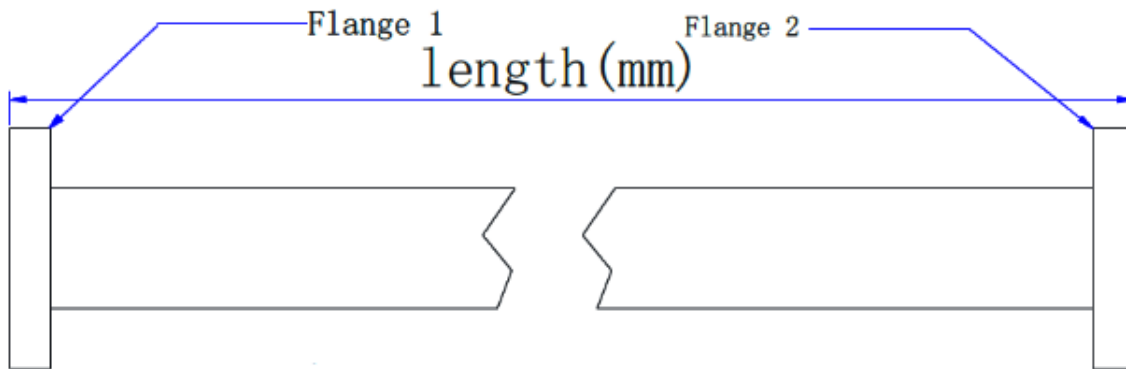
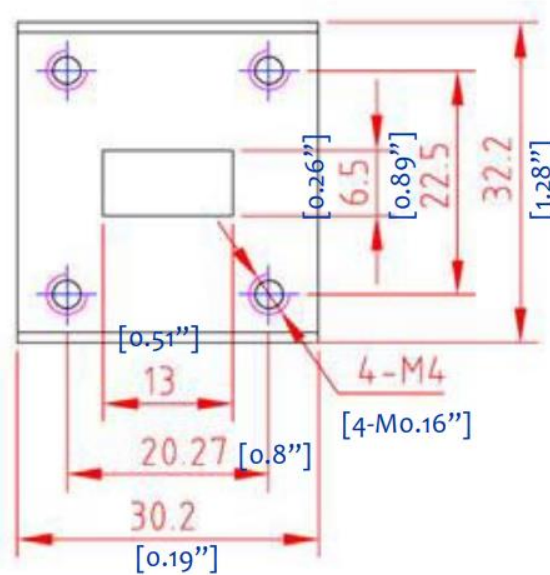
* Other custom lengths available. Please inquire.

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-54°C~+85°C (Case Temperature)
Storage Temperature	-60°C~+125°C
Thermal Shock	-54°C~+85°C (5 Cycles / 10 hours)
*Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
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)

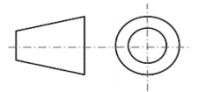
*For vibration testing details please see additional information section.

Outline Drawing



Notes:

1. Flange Material: Nickel Plated Brass
2. Internal Body Finish: Silver Plated Brass
3. Jacket Material: Vulcanized Rubber
4. All dimensions are in millimeters [inches]



Additional Information

Documentation

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

Webpage

Ordering Information

Part Number	Modification	Description
RFWF51-12Inch	WR51	15GHz-22GHz Flexible Waveguide

Important Notice

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