

WR51 Flexible Twistable Waveguide 15GHz-22GHz



Product Description

RFWF51-24Inch 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°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		600 +/- 3%		mm
Waveguide Type		WR51		
Flange Type		CPRG, CPRF, COVER, CHOKE available		
Flange Holes		Through		

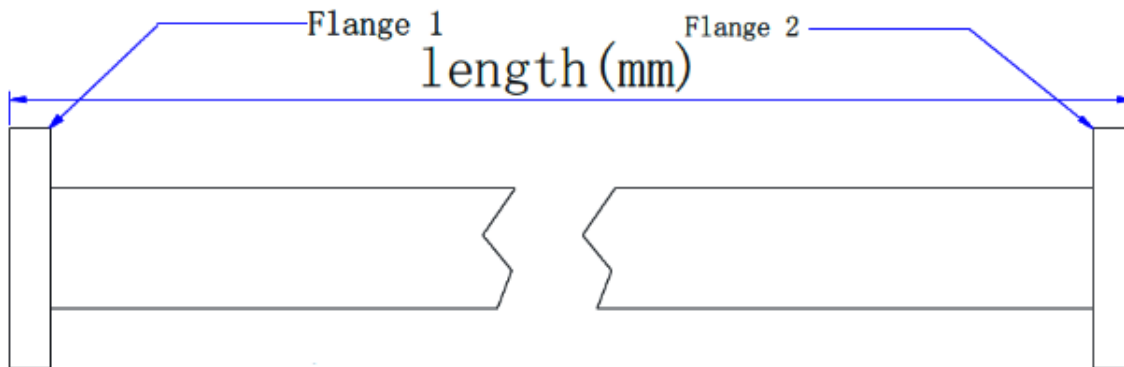
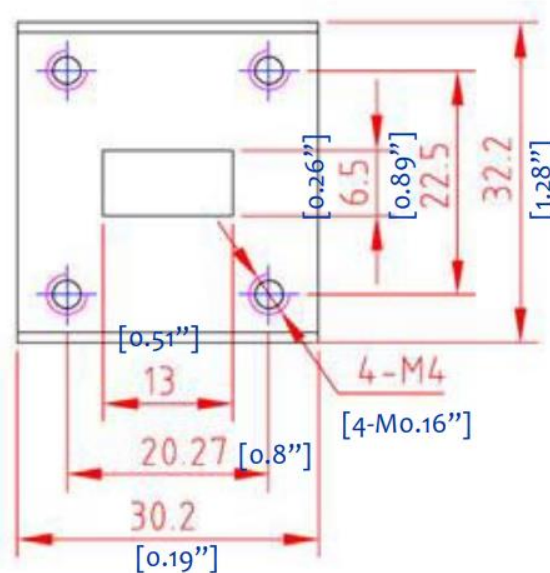
* Other custom lengths available. Please inquire.

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)

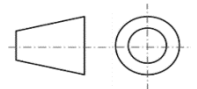
*For vibration testing details please see additional information section.

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
RFWF51-24Inch	WR51	15GHz-22GHz Flexible Waveguide

Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.