

WR75 Flexible Twistable Waveguide 10GHz-15GHz



Product Description

RFWF75-12Inch is a flexible twistable waveguide with a frequency range of 10 to 15GHz.

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		10 - 15		GHz
Insertion Loss		0.50		dB
VSWR			1.20	:1
Max Twist			345	deg/m
Power Handling (CW)		0.75		KW
Peak Power Handling		0.10		MW
* Length		300 +/- 3%		mm
Waveguide Type		WR75		
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.

The technical drawing consists of two parts:

- Top View:** A square flange with a total width of 38 mm [1.5"]. It features four mounting holes, each with a diameter of 4-Ø4^{+0.10}/_{-0.07}. The distance between the centers of opposite holes is 26.42 mm [1.504"], with a tolerance of ±0.038 mm. The hole pattern is offset from the center by 9.525±0.038 mm [0.375"±0.001"].
- Side View:** Shows the profile of the flange with a thickness of 28.5 mm [1.12"], a tolerance of ±0.003". The outer edge has a radius of 4-R3 [4-R0.12"].

Notes:

- Flange Material: Nickel Plated Brass
- Internal Body Finish: Silver Plated Brass
- Jacket Material: Vulcanized Rubber
- All dimensions are in millimeters [inches]

A small icon of a cone and a circle is located at the bottom right corner of the page.

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
RFWF75-12Inch	WR75	10GHz-15GHz Flexible Waveguide

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