

WR90 Waveguide Band Pass Filter 9GHz - 9.2GHz



Product Description

RWBPF90B is a WR90 waveguide filter with a frequency range of 9 to 9.2GHz.

The power handling of this filter is 150W. The maximum insertion loss is 0.5dB.

The working temperature of this product is between 0°C and + 60°C.

Features

- Waveguide Filter - High Q and high rejection
- Flat frequency response for pass band
- Inband Low insertion loss, outband high rejection
- Wide bandwidth Available from 5-50%(f0)
- Designs that Cover up to 40 GHz Also Available
- MIL-E-5400 standard

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		9		9.2	GHz
Insertion Loss			0.4	0.5	dB
Pass Band Ripple			0.1		dB
VSWR			1.15	1.25	: 1
Rejection	@4-8.575GHz	55	70		dB
	@9.625-12GHz	51	70		dB
Power Handling (Peak at a 10% Dc with a 5usec PW)			150		W
Waveguide Type		WR90			
Weight			0.31 Max		lbs
Package	Epoxy Sealed (Standard)				
	Hermetically Sealed (Optional)				

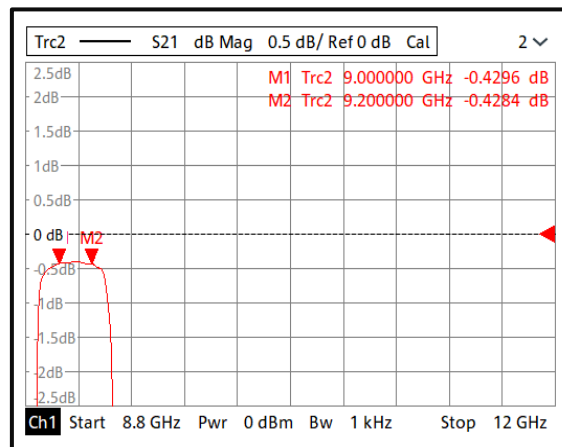
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	0°C to +60°C (Case Temperature)
Storage Temperature	-40°C to +70°C
Thermal Shock	0°C → +60°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)

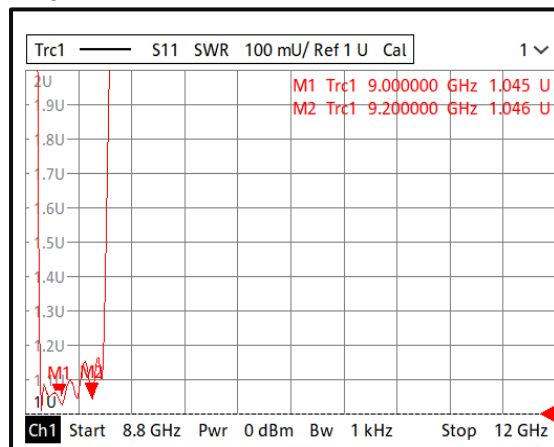
*For vibration testing details please see additional information section.

Typical Performance Plots

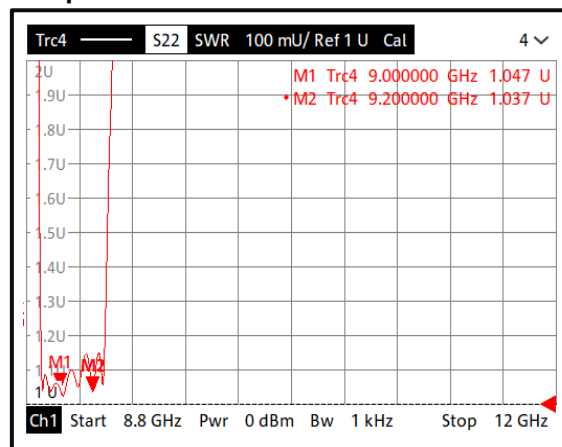
Insertion Loss



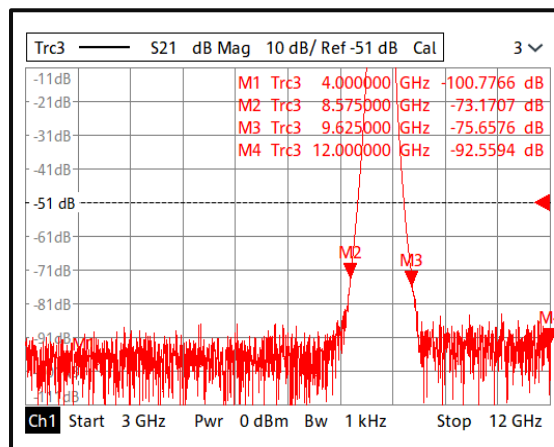
Input VSWR



Output VSWR

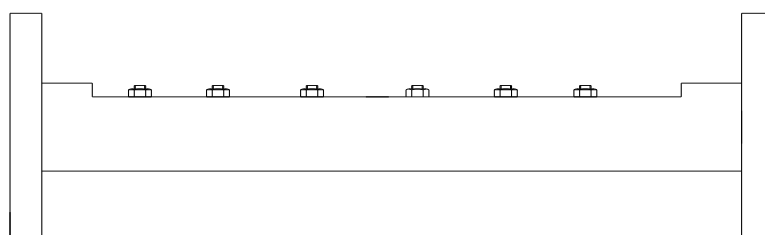
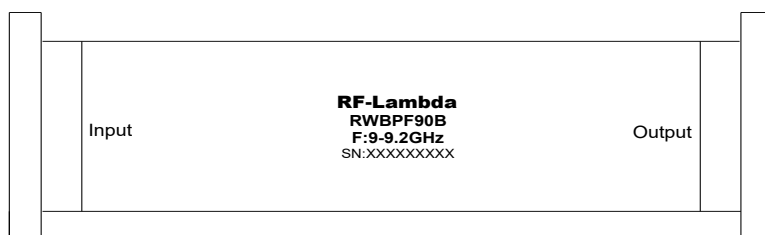


Rejection

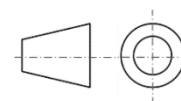


Outline Drawing

Type A



- Notes:
1. Package Material: Aluminum
 2. Finish: Blue Paint
 3. All dimensions are in millimeters [inches].
 4. Outline Tolerances ± 0.5 [0.02], Mounting Hole Tolerances ± 0.2 [0.008] unless otherwise specified.



Additional Information

Documentation

Webpage

ESD Policy

https://rflambda.com/pdf/rflambda_esd_control.pdf

Connector Torque Specifications

https://www.rflambda.com/pdf/Torque_Specifications.pdf

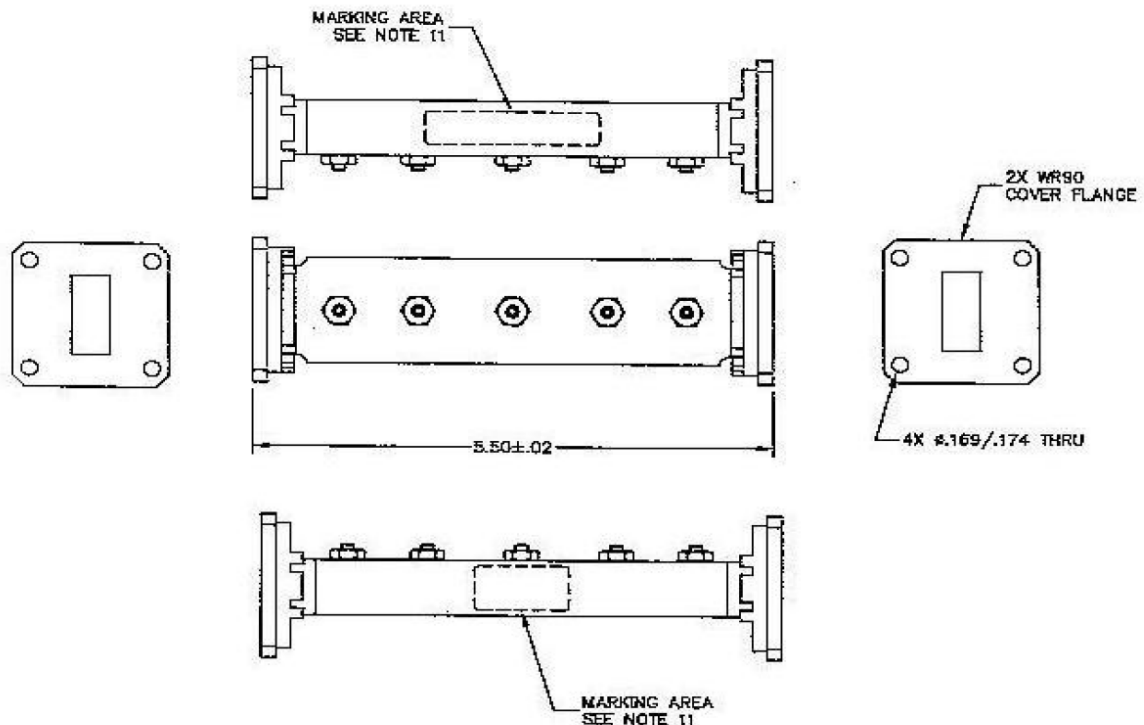
Random Vibration Test Standard

https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Outline Drawing:

All Dimensions in mm [inches]

Type B



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Ordering Information

Part Number	Modification	Description
RWBPF90B	WR90	9GHz-9.2GHz Waveguide Filter

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