



Waveguide Bandpass Filter, V Band, 51.0 to 55.0 GHz

Description:

Model SWF-53304330-15-B1 is a V band waveguide bandpass filter with a passband frequency of 51.0 to 55.0 GHz and rejection frequencies from DC to 47 GHz and 59 to 70 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 30 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available under different model numbers.



Features:

- Low Cost
- Low Insertion Loss
- High Rejection

Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	51.0 GHz		55.0 GHz
Passband Insertion Loss		1.5 dB	2.5 dB
Passband Ripple		±0.25 dB	
Rejection Frequency, Low Side	DC		47 GHz
Rejection Frequency, High Side	59 GHz		70 GHz
Rejection		30 dB	
Passband VSWR		1.5:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

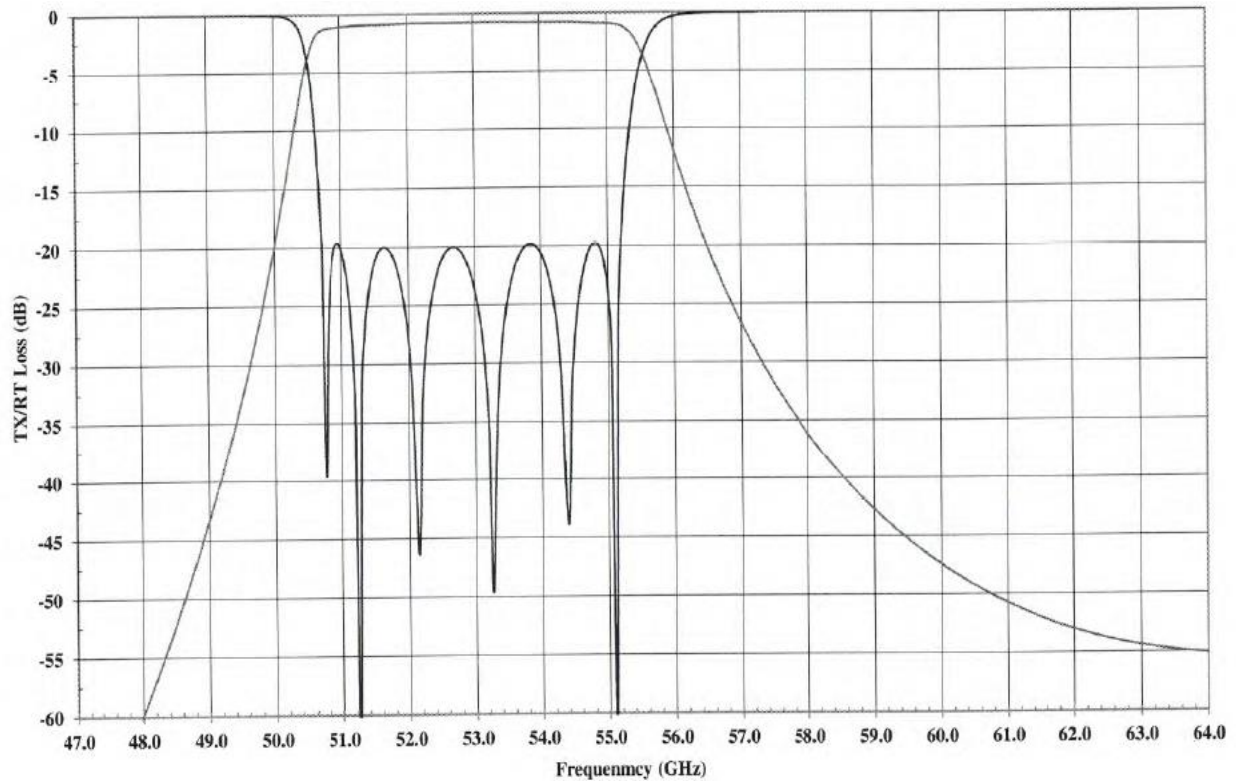
Item	Specification
Waveguide Port	WR-15 Waveguide with UG-385/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.35" (L) X 0.75" (Ø)
Outline	WF-BV-1.35



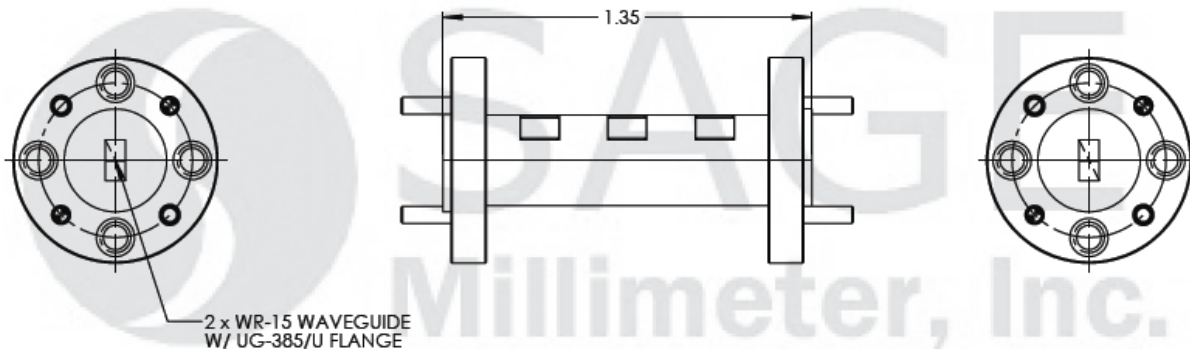


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Typical Performance vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data presented were simulated. Actual data may vary.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the waveguide will degrade performance and/or damage the device.



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