



Waveguide Bandpass Filter, V Band, 57.0 to 59.0 GHz

Description:

Model SWF-58302350-15-B1 is a V band waveguide bandpass filter with a passband frequency of 57.0 to 59.0 GHz and rejection frequencies from 48.0 to 55.0 GHz and 61.0 to 78.0 GHz. The nominal insertion loss of the bandpass filter is 2.5 dB and the typical rejection is 50 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:

- IEEE 802.11ad WiGig Systems
- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	57.0 GHz		59.0 GHz
Passband Insertion Loss		2.5 dB	
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	48.0 GHz		55.0 GHz
Rejection Frequency, High Side	61.0 GHz		78.0 GHz
Rejection		50 dB	
Passband Return Loss		17 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

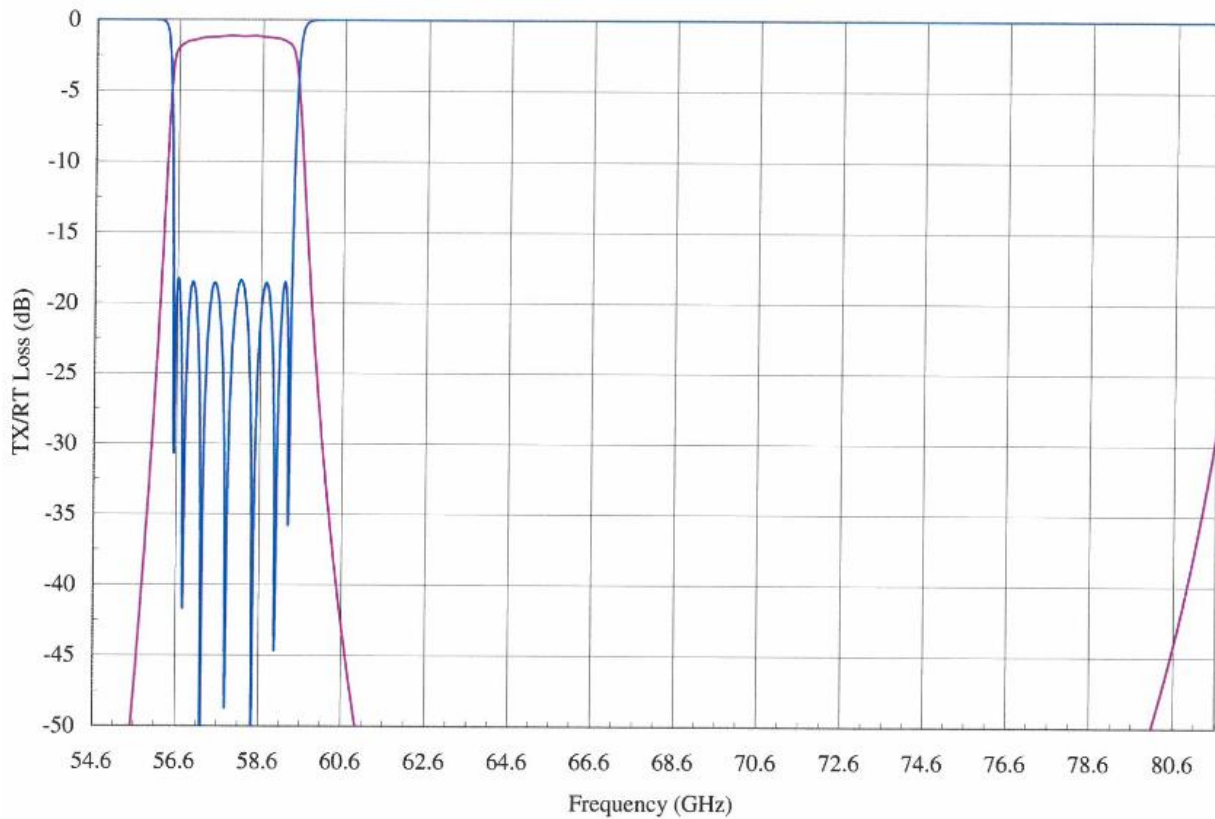
Mechanical Specifications:

Item	Specification
Waveguide Port	WR-15 Waveguide with UG-385/U Flange
Material	Brass
Finish	Gold Plated
Weight	0.4 Oz
Size	1.20" (L) X 0.75" (Ø)
Outline	WF-BV

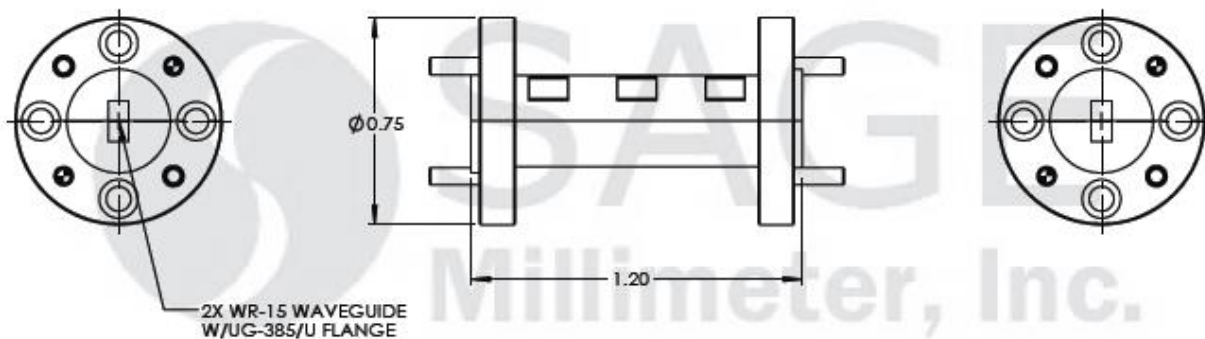


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Typical Performance vs. Frequency



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.

