



Waveguide Bandpass Filter, E Band, 74 to 76 GHz

Description:

Model SWF-75302340-12-B1 is an E band waveguide bandpass filter with a passband frequency of 74 to 76 GHz and rejection frequencies from DC to 70 GHz and 80 to 100 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 40 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:

- E Band Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	74 GHz		76 GHz
Passband Insertion Loss		1.5 dB	2.5 dB
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	DC		70 GHz
Rejection Frequency, High Side	80 GHz		100 GHz
Rejection		40 dB	
Passband VSWR		1.5:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

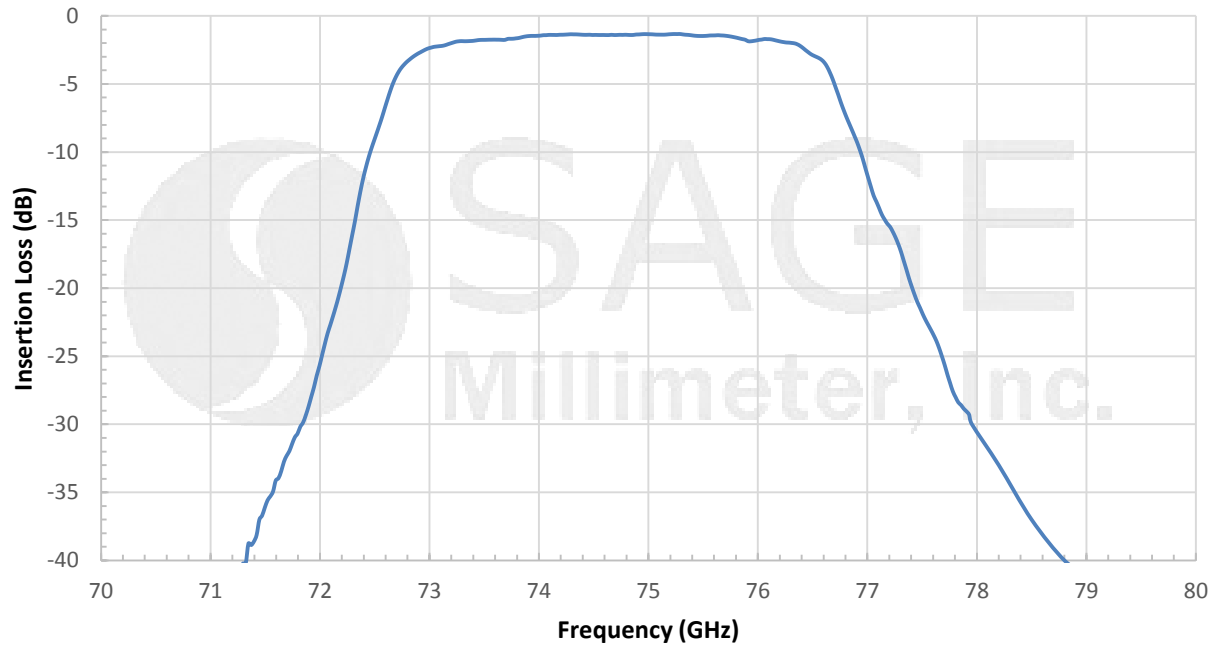
Item	Specification
Waveguide	WR-12 Waveguide with UG-387/U Flange
Size	1.20" (L) X 0.75" (Ø)
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WF-BE



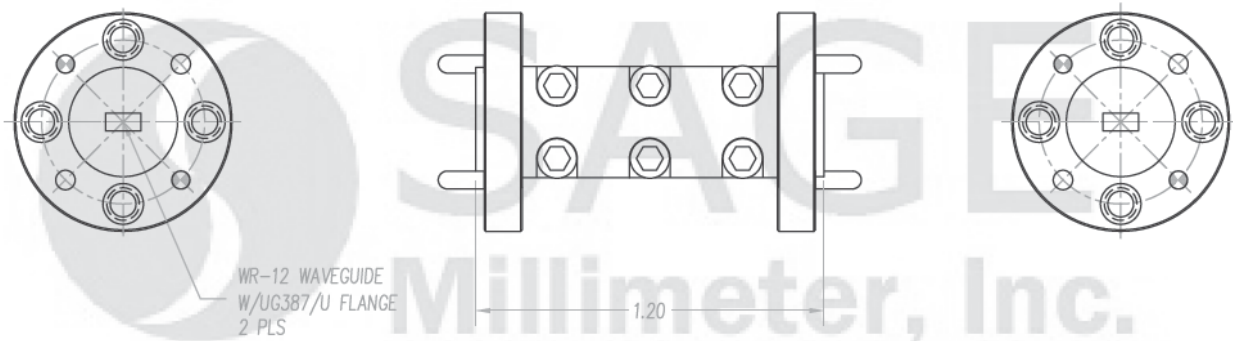


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Typical Insertion Loss vs. Frequency



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



Note:

- All data are presented using a limited sample lot, actual data may vary unit to unit.
- All testing was performed under 25°C case temperature.
- 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.

