



Waveguide Bandpass Filter, W Band, 71 to 76 GHz

Description:

Model SWF-74305350-10-B1 is a W band waveguide bandpass filter with a passband of 71 to 76 GHz and rejects the frequencies ranging from DC to 67 GHz and 81 to 105 GHz. The nominal insertion loss of the bandpass filter is 2.0 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 design models 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	71 GHz		76 GHz
Passband Insertion Loss		2.0 dB	2.5 dB
Passband Ripple		± 0.3 dB	
Rejection Frequency, Low Side	DC		67 GHz
Rejection Frequency, High Side	81 GHz		105 GHz
Rejection	40 dB	50 dB	
Passband Return Loss		14 dB	
Power Handling			10 W (CW)
Specification Temperature		+25 °C	
Operation Temperature	-45 °C		+85 °C

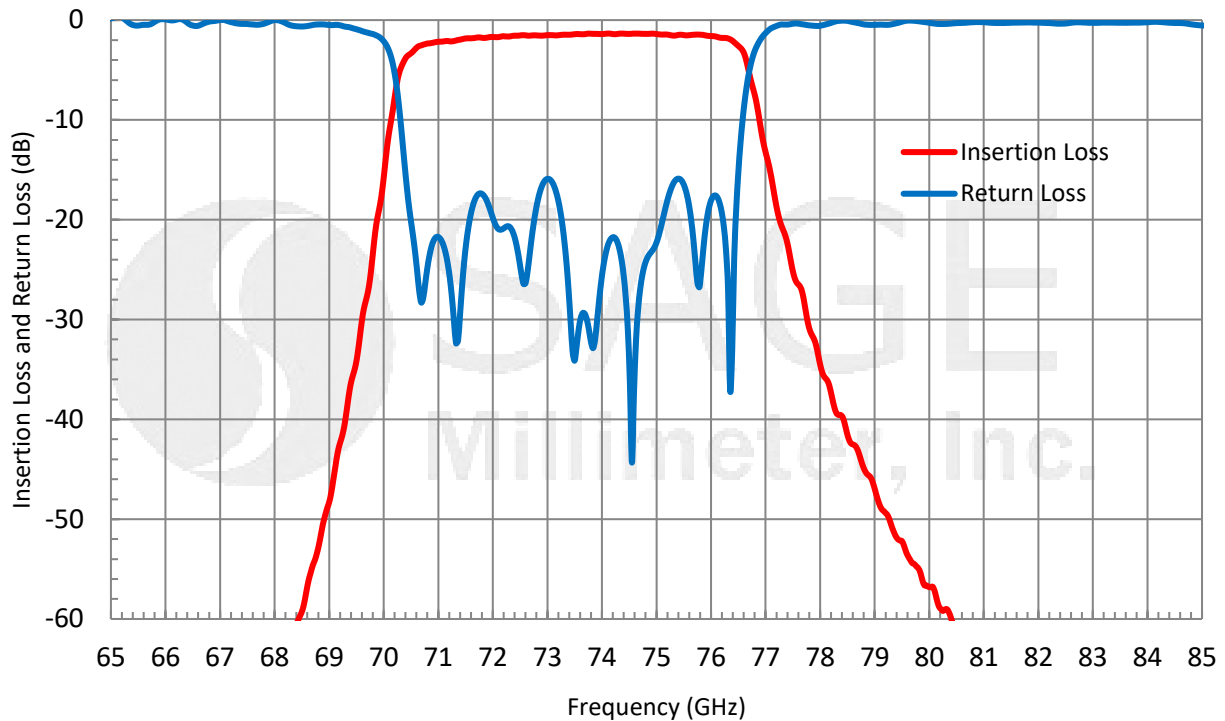
Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-10 Waveguide with UG-387/U-M Flange
Material	Aluminum
Weight	0.3 Oz
Finishing	Gold Plated
Size	1.20" (L) X 0.75" (Ø)
Outline	WF-BW

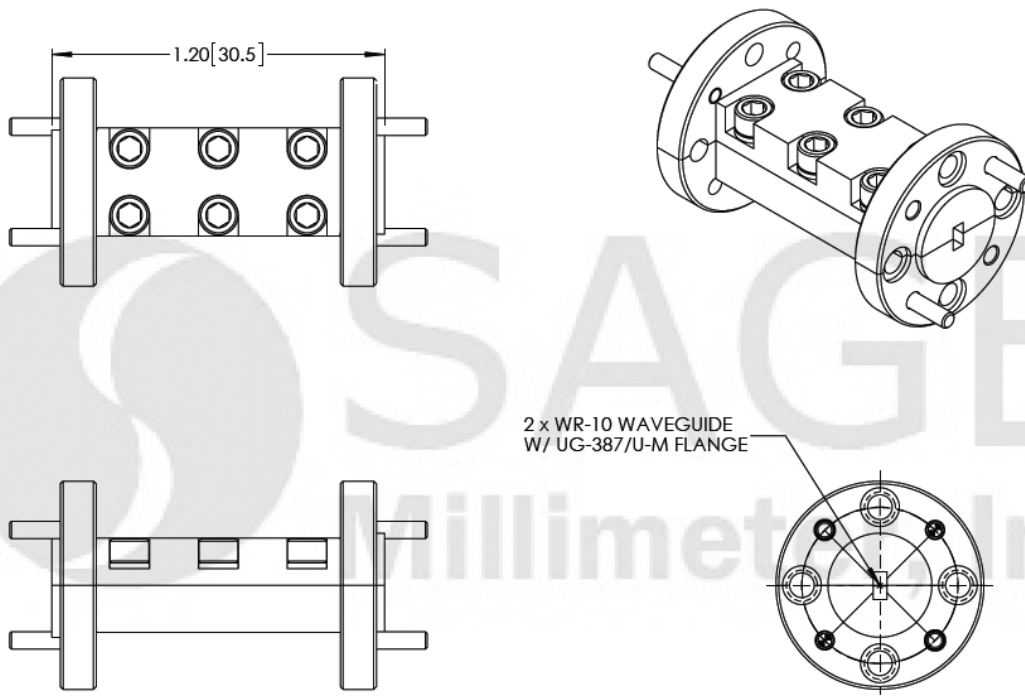


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Typical Performance vs. Frequency



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



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Note:

- All data presented is collected from a 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:

- Exceeding absolute maximum ratings shown will damage the device.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

