SWF-84305350-10-B1

Rev. 1.0

Waveguide Bandpass Filter, W Band, 81 to 86 GHz

Description:

Model SWF-84305350-10-B1 is a W band waveguide bandpass filter with a passband frequency of 81 to 86 GHz and rejection frequencies from DC to 78 GHz and 90 to 120 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the minimum 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:

- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	81 GHz		86 GHz
Passband Insertion Loss		2.0 dB	2.5 dB
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	DC		78 GHz
Rejection Frequency, High Side	90 GHz		120 GHz
Rejection	40 dB	50 dB	
Passband Return Loss		14 dB	
Power Handling			10 W (CW)
Specification Temperature		+25 °C	
Operation Temperature	-40 °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

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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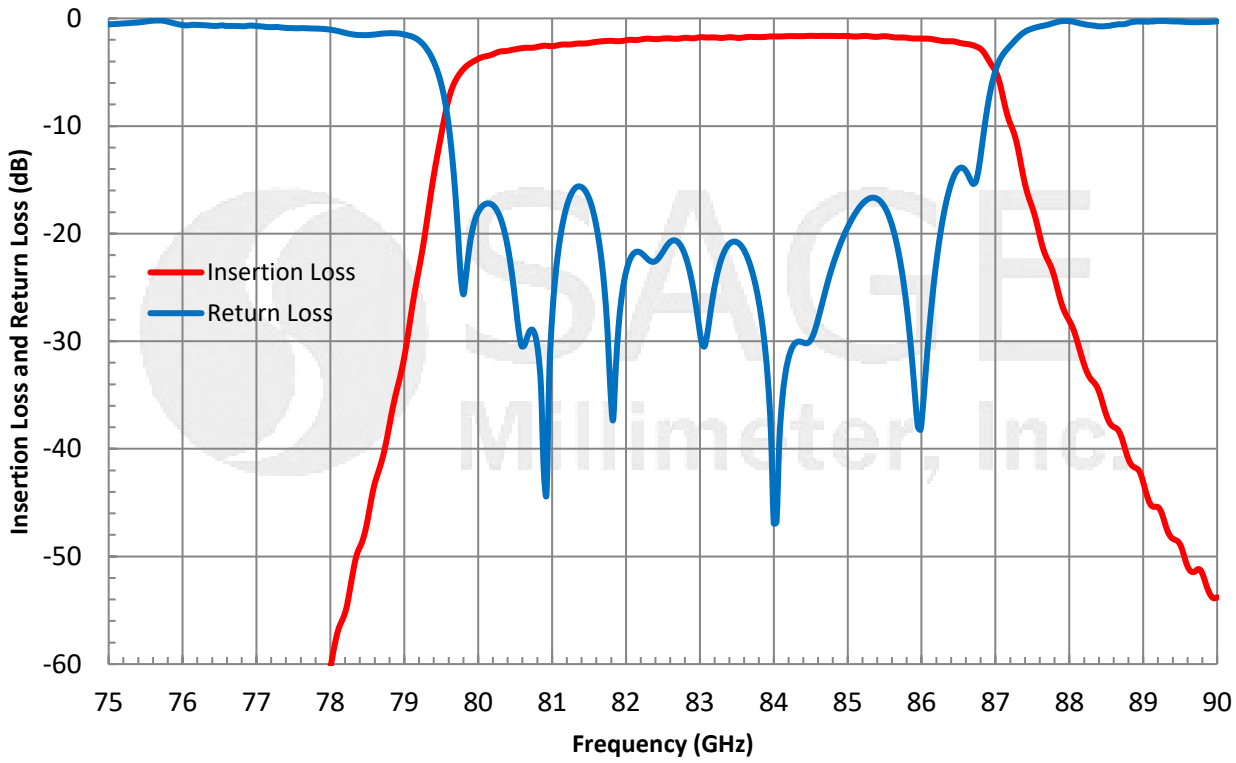
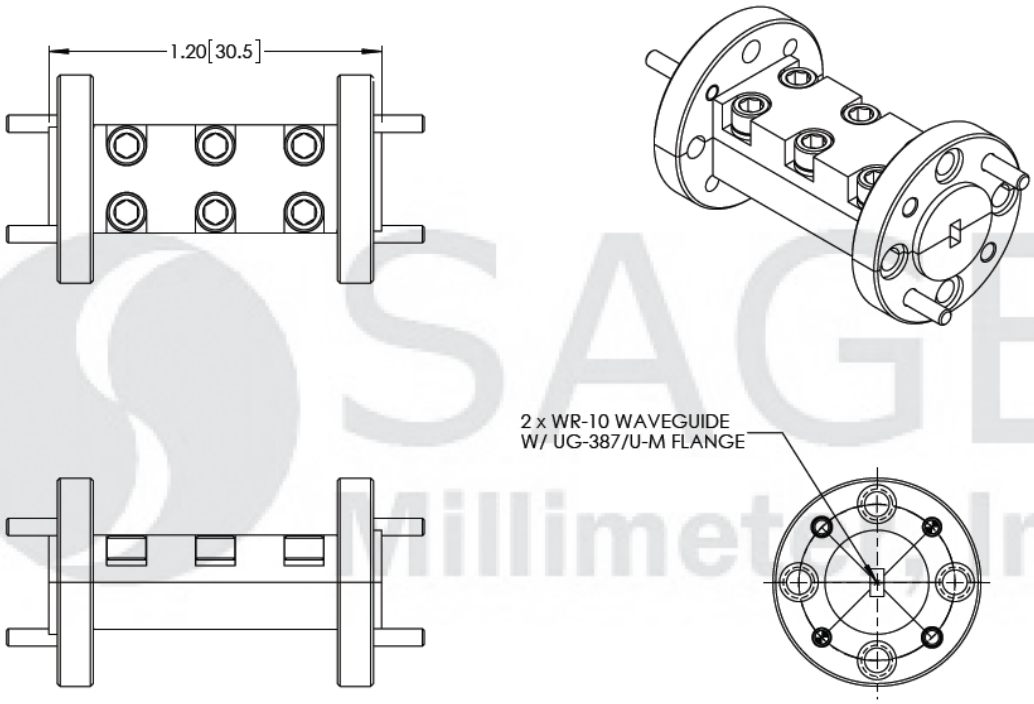
Typical Performance vs. Frequency



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.

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