



Waveguide Bandpass Filter, U Band, 42 to 54 GHz

Description:

Model SWF-48312340-19-B1 is a U band waveguide bandpass filter with a passband frequency of 42 to 54 GHz and rejection frequencies from DC to 38 GHz and 57 to 90 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 40 dB. Since passband frequency can be selected by modifying the design, custom designs are available under different model numbers.



Features:

- Low Insertion Loss
- High Rejection

Applications:

- IEEE 802.11ad WiGig Systems
- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	42 GHz		54 GHz
Passband Insertion Loss		1.5 dB	
Rejection Frequency, Low Side	DC		38 GHz
Rejection Frequency, High Side	57 GHz		90 GHz
Rejection		40 dB	
Passband Return Loss		14 dB	
Power Handling (CW)			100 Watts
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

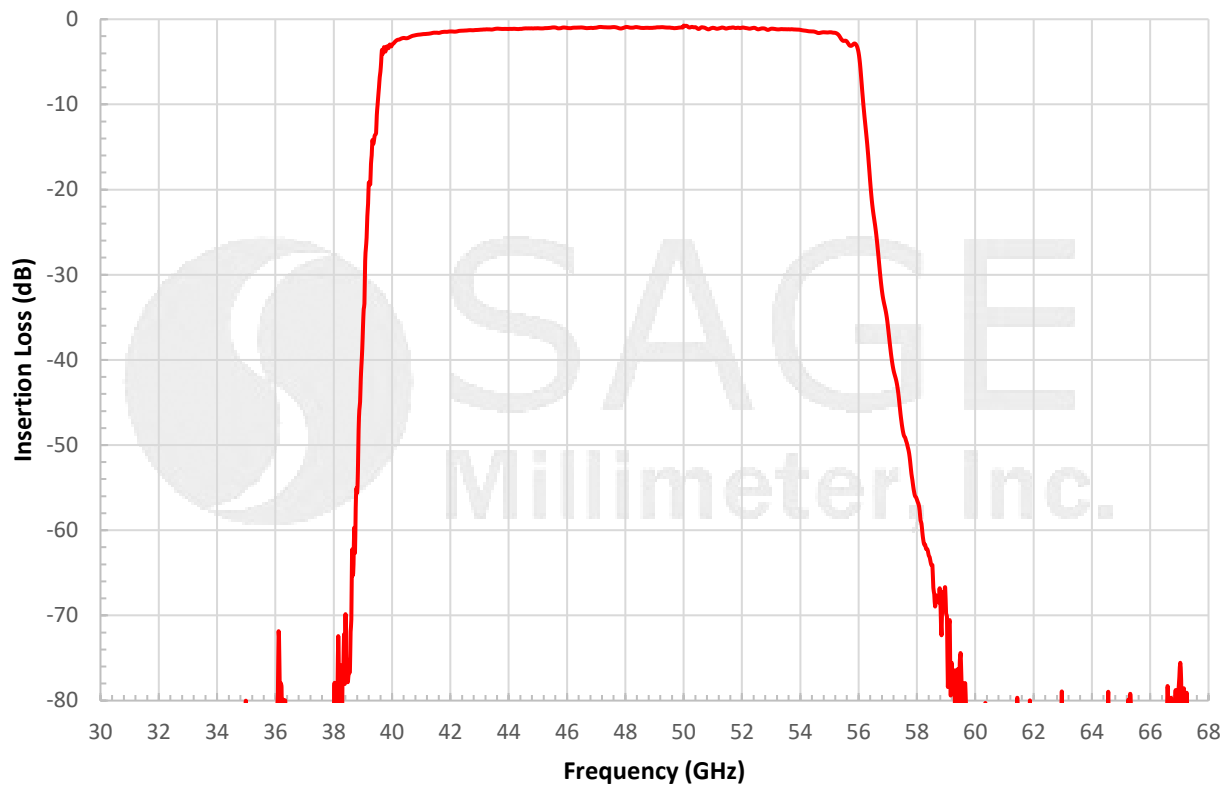
Item	Specification
Waveguide	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	6.8 Oz
Size	2.25" (L) X 1.13" (W) X 1.13" (H)
Outline	WF-BU-A-2.25



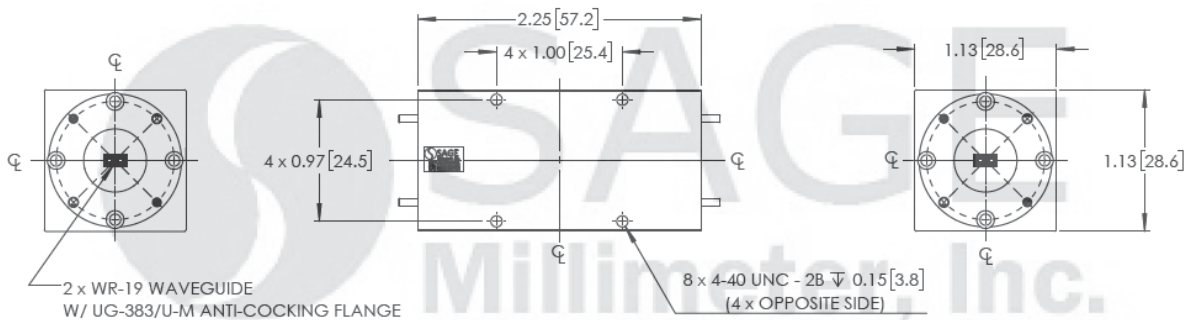


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Typical Insertion Loss vs. Frequency



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



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- 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 antenna will cause performance degradation and possible device damage.

