



Waveguide Bandpass Filter, Q Band, 43 to 46 GHz

Description:

Model SWF-45303340-22-B1 is a Q band waveguide bandpass filter with a passband frequency of 43 to 46 GHz and rejection frequencies from 30 to 42 GHz and 47 to 55 GHz. The nominal insertion loss of the bandpass filter is 2.0 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:

- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	43 GHz		46 GHz
Passband Insertion Loss		2.0 dB	
Passband Ripple		± 0.25 dB	
Rejection Frequency, Low Side	30 GHz		42 GHz
Rejection Frequency, High Side	47 GHz		55 GHz
Rejection		40 dB	
Passband Return Loss		15 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

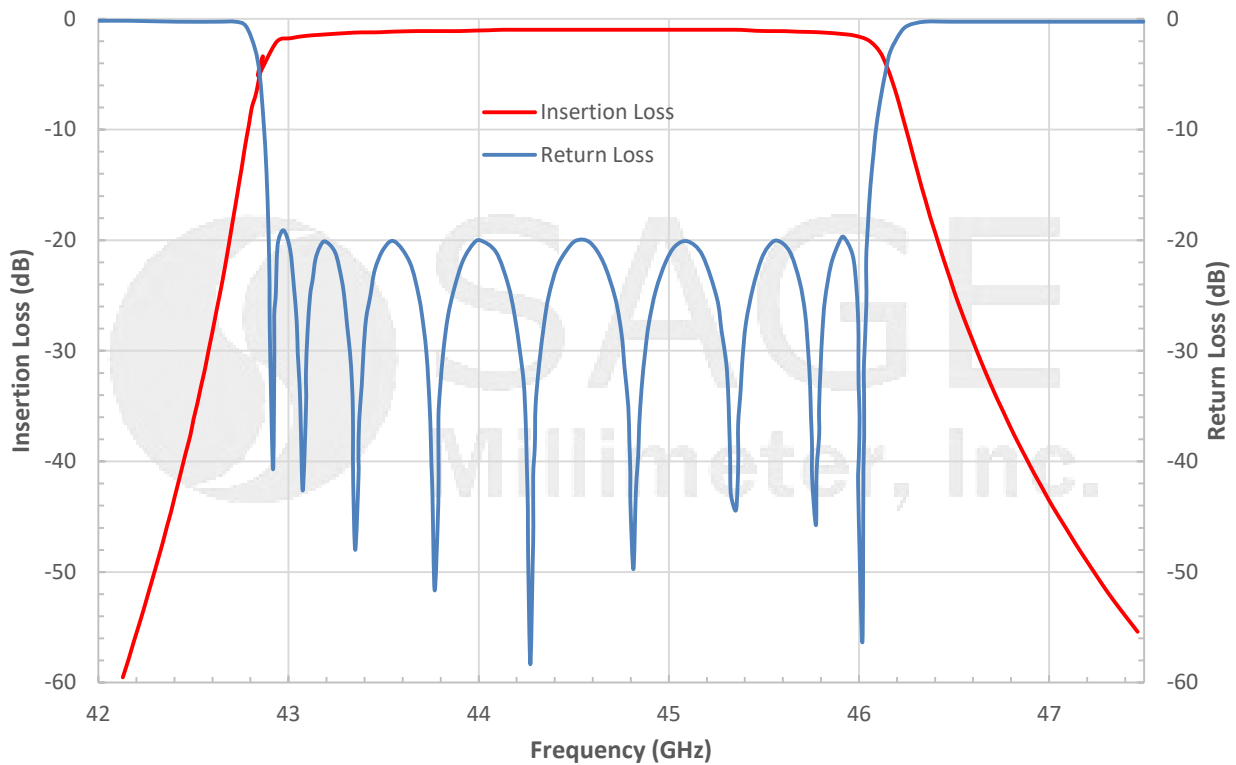
Item	Specification
Waveguide	WR-22 Waveguide with UG-383/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	6.2 Oz
Size	2.00" (L) X 1.13" (W) X 1.13" (H)
Outline	WF-BQ-2.0



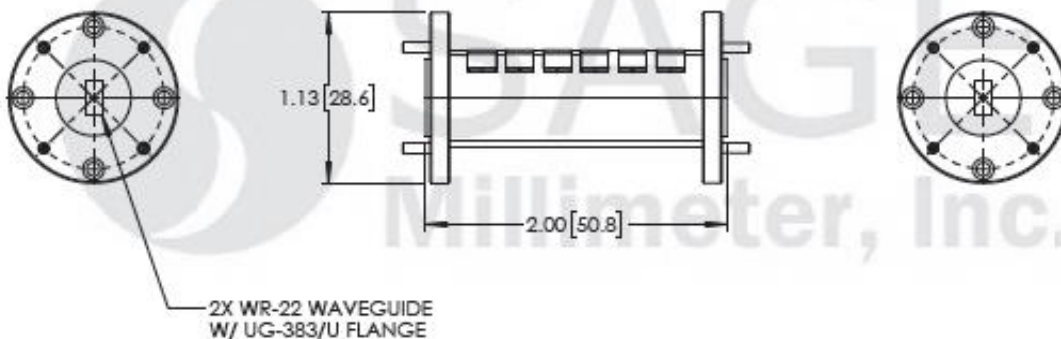


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Typical Performance vs. Frequency



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



Note:

- All data presented is simulated. Actual data may vary, slightly.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

