SWF-50354340-22-L1

Rev. 1.0

Q Band Waveguide, Lowpass Filter, 30 to 50 GHz

Description:

Model SWF-50354340-22-L1 is a Q band waveguide lowpass filter with a passband frequency from 30 to 50 GHz and a rejection frequency 54 to 100 GHz. Due to the waveguide cut off nature, the low side of the filter has rejection range of DC to 25 GHz. The filter provides a nominal insertion loss of 1.5 dB across its passband and a typical rejection of 40 dB. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered 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	30 GHz		50 GHz
Passband Insertion Loss		1.5 dB	
Rejection Frequency, Low Side	DC		25 GHz
Rejection Frequency, High Side	54 GHz		100 GHz
Rejection		40 dB	
Passband Return Loss		14 dB	
Power Handling			100 W (CW)
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Waveguide	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	6.8 Oz
Size	1.80” (L) X 1.13” (W) X 1.13” (H)
Outline	WF-LQ-A

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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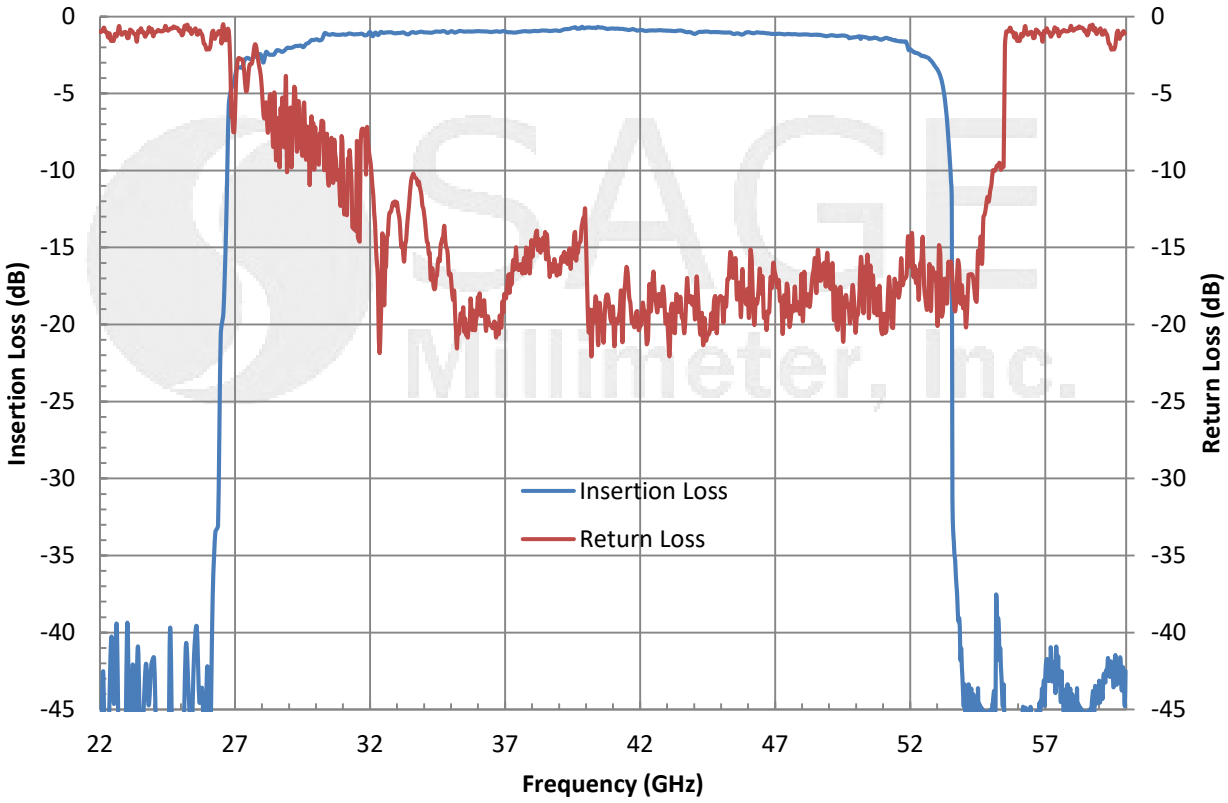
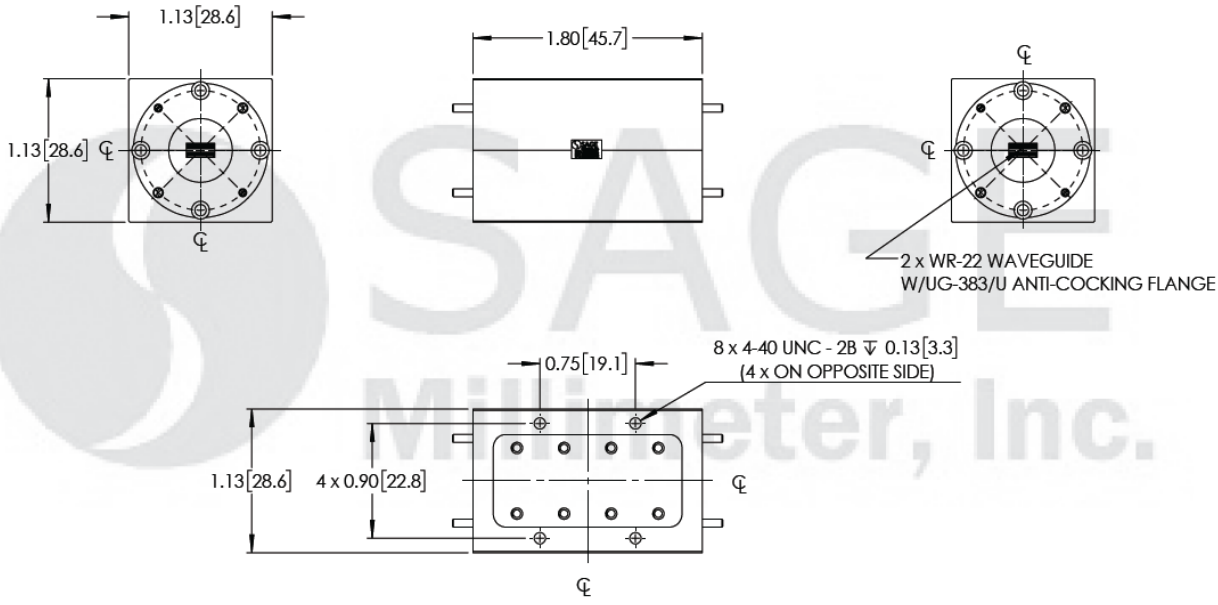
Typical Performance vs. Frequency



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, 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 waveguide will degrade performance and/or damage the device.

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