

Waveguide Lowpass Filter, E Band, 50 to 80 GHz

Description:

Model SWF-80384340-12-L1-WP is an E band waveguide lowpass filter with a passband frequency from 50 to 80 GHz and a rejection frequency from 86 to 110 GHz. Due to the corrugated design of the WR-12 waveguide, the filter also has a low side rejection frequency from DC to 48 GHz. As such, this filter can also be accepted as a bandpass filter. The filter provides a nominal insertion loss of 2.2 dB across its passband and a typical rejection of 30 dB. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers.



Features:

- Full Band Operation
- Low Insertion Loss
- High Rejection

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	50 GHz		80 GHz
Passband Insertion Loss		2.2 dB	
Passband Ripple		±0.5 dB	
Rejection Frequency, Low Side	DC		48 GHz
Rejection Frequency, High Side	86 GHz		110 GHz
Rejection		30 dB	
Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

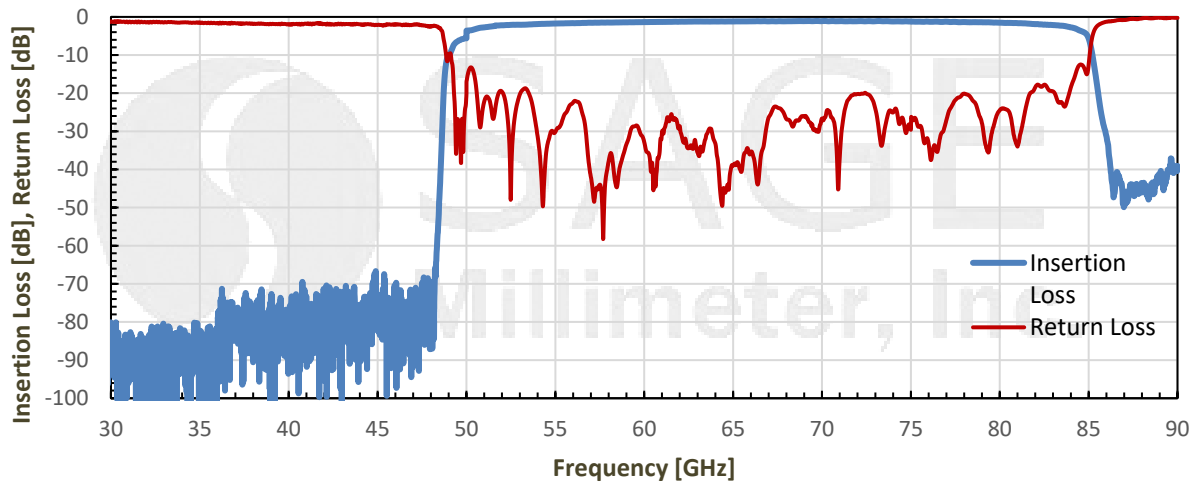
Mechanical Specifications:

Item	Specification
Waveguide	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Size	2.20" (L) X 0.75" (W) x 0.75" (H)
Material	Brass
Finish	Gold Plated
Weight	3.8 Oz
Outline	WF-LE-A

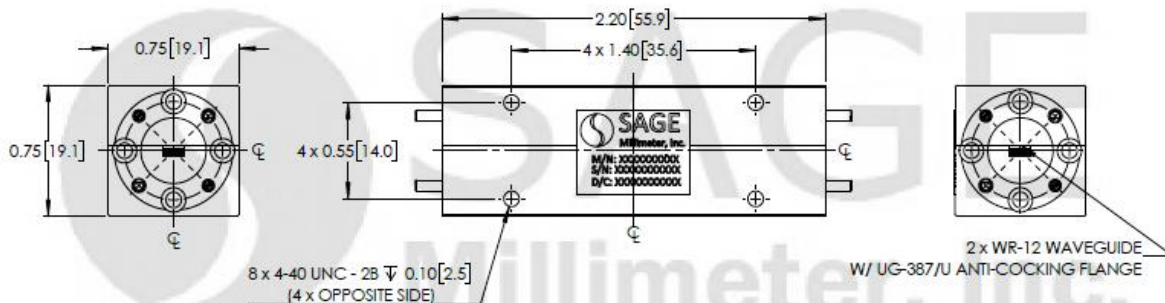


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Typical Rejection vs. Frequency



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



Note:

- Eravant 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.