



## Waveguide Highpass Filter, Q Band, 34 GHz

### Description:

**Model SWF-34330340-22-H1** is a Q band waveguide highpass filter with a passband frequency of 34 GHz and higher and a rejection frequency from DC to 31 GHz. The filter provides a nominal insertion loss of 2.0 dB across its passband and a typical rejection of 40 dB. Since the low end cutoff frequency can be changed by modifying the design, custom designs can be offered 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	34 GHz		
Passband Insertion Loss		2.0 dB	
Rejection Frequency	DC		31 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

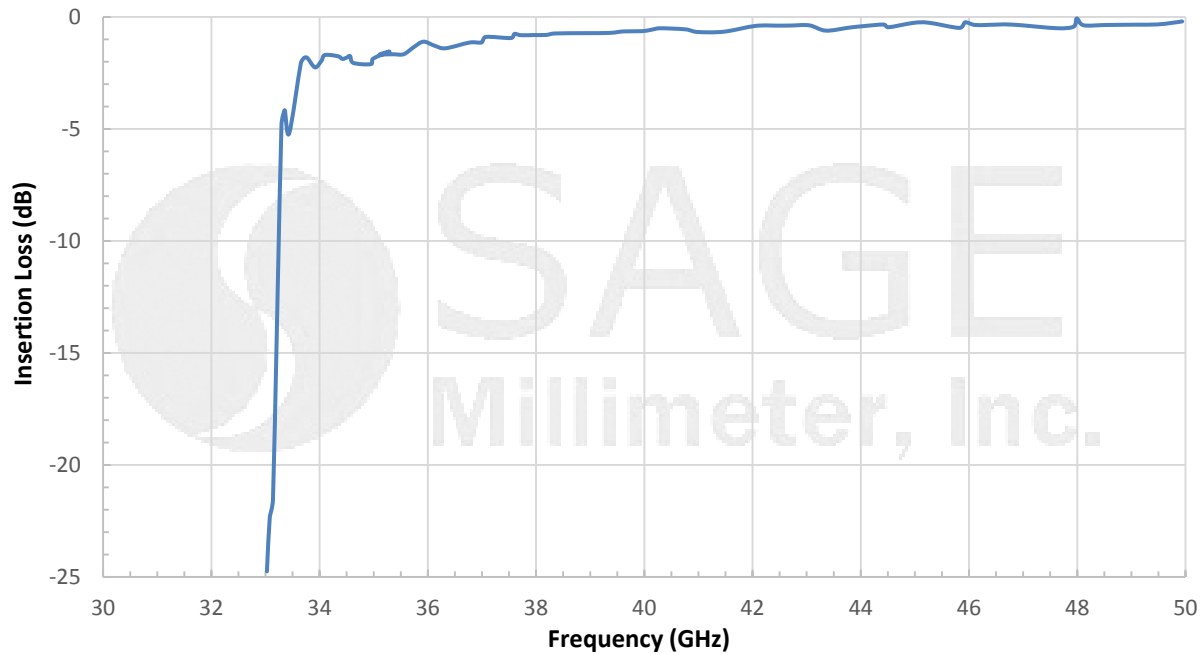
Item	Specification
Waveguide	WR-22 with UG-383/U Flange
Size	2.40" (L) X 1.125" (Ø)
Material	Aluminum
Finish	Gold Plated
Weight	1.4 Oz
Outline	WF-HQ-2.4-2



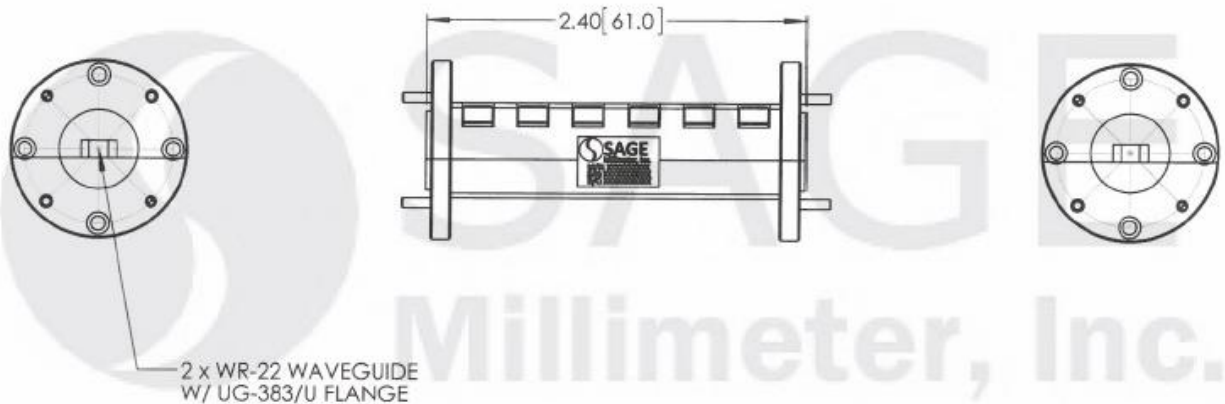


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### Typical Insertion Loss vs. Frequency



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



#### Note:

- All data are presented by using a limited 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:

- Any foreign objects in the waveguide will degrade performance and/or damage the device.

