

## Waveguide Highpass Filter, W Band

### Description:

**Model SWF-90384340-10-H1** is a W band waveguide highpass filter with a passband frequency of 90 GHz and higher and a rejection frequency from DC to 84 GHz. The filter provides a nominal insertion loss of 1.0 dB across its passband with a low ripple and a typical rejection of 40 dB. Since the low side 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
- Test Labs

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	90 GHz		
Passband Insertion Loss		1.0 dB	
Passband Ripple		±0.3 dB	
Rejection Frequency	DC		84 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

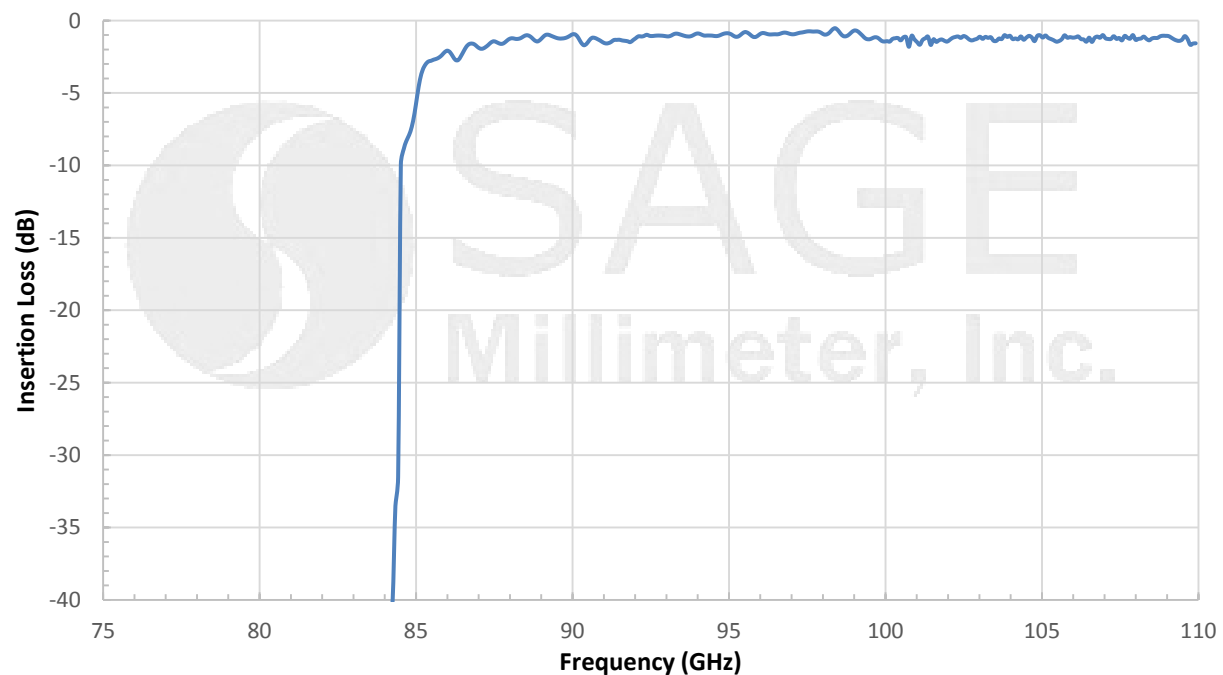
### Mechanical Specifications:

Item	Specification
Waveguide	WR-10 with UG-387/U-M Flange
Size	1.20" (L) x 0.75" (Ø)
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WF-HW

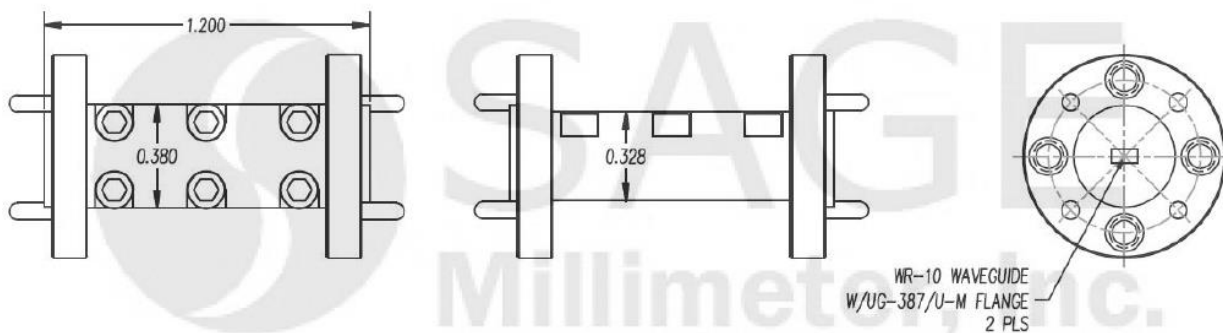


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### Typical Insertion Loss vs. Frequency



**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.

