



## Waveguide Lowpass Filter, V Band

### Description:

**Model SWF-75379340-15-L1** is a V band waveguide lowpass filter with a passband frequency from 50 to 75 GHz and a rejection frequency from 79 to 120 GHz. The filter provides a nominal insertion loss of 1.5 dB across its passband with a low ripple 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:

- Full Band Operation
- Low Insertion Loss
- High Rejection

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	50 GHz		75 GHz
Passband Insertion Loss		1.5 dB	
Passband Ripple		±0.4 dB	
Rejection Frequency, Low Side	DC		40 GHz
Rejection Frequency, High Side	79 GHz		120 GHz
Rejection		40 dB	
Passband Return Loss		10 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

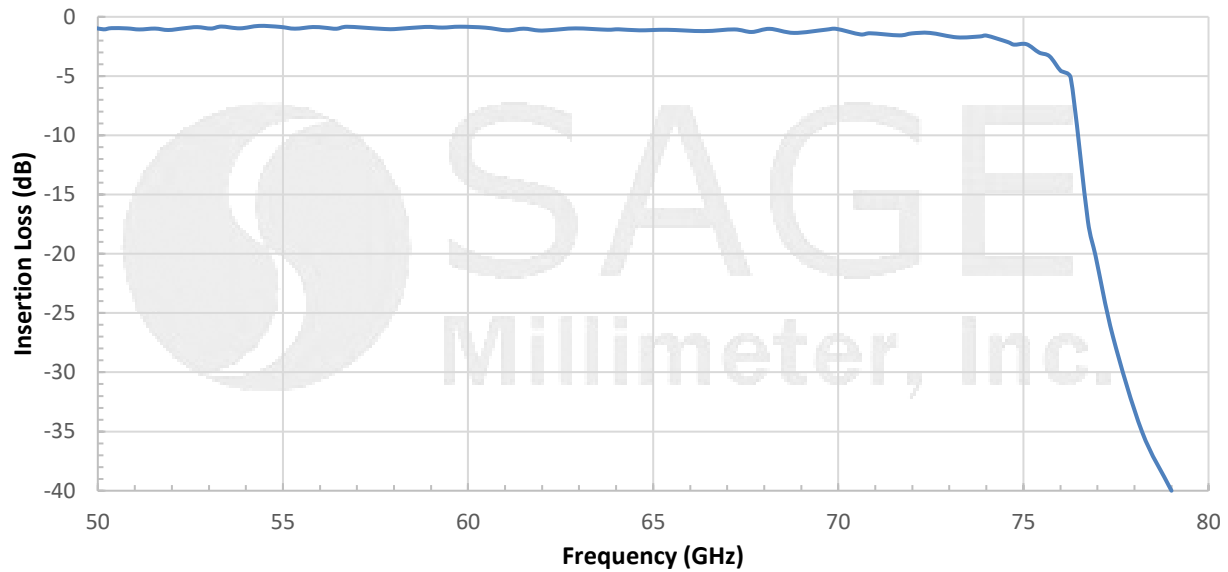
Item	Specification
Waveguide	WR-15 Waveguide with UG-385/U Flange
Size	1.20" (L) X 0.75" (W) x 0.75" (H)
Material	Brass
Finish	Gold Plated
Weight	2.2 Oz
Outline	WF-LV-A-1.2



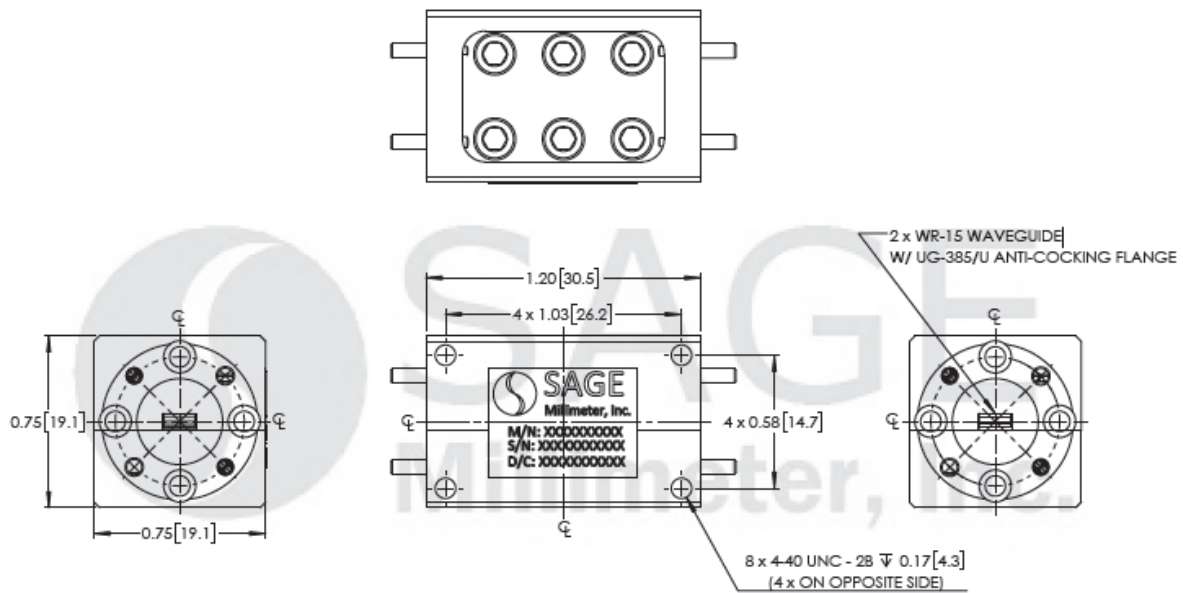


## Waveguide Lowpass Filter, V Band

### Typical Insertion Loss vs. Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



## Waveguide Lowpass Filter, V Band

**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.

