

## Waveguide Bandpass Filter, U Band, 34 to 67 GHz

### Description:

**Model SWF-51333340-19-B1-WPC** is a U band waveguide bandpass filter with a passband frequency of 34 to 67 GHz and rejection frequencies from DC to 30 GHz and 71 to 120 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 40 dB. Since passband frequency can be selected by modifying the design, custom designs are available under different model numbers.



### Features:

- Broad Band
- Low Insertion Loss
- High Rejection

### Applications:

- IEEE 802.11ad WiGig Systems
- Test Labs
- Instrumentation
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	34 GHz		67 GHz
Passband Insertion Loss		1.5 dB	
Rejection Frequency, Low Side	DC		30 GHz
Rejection Frequency, High Side	71 GHz		120 GHz
Rejection	20 dB	40 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

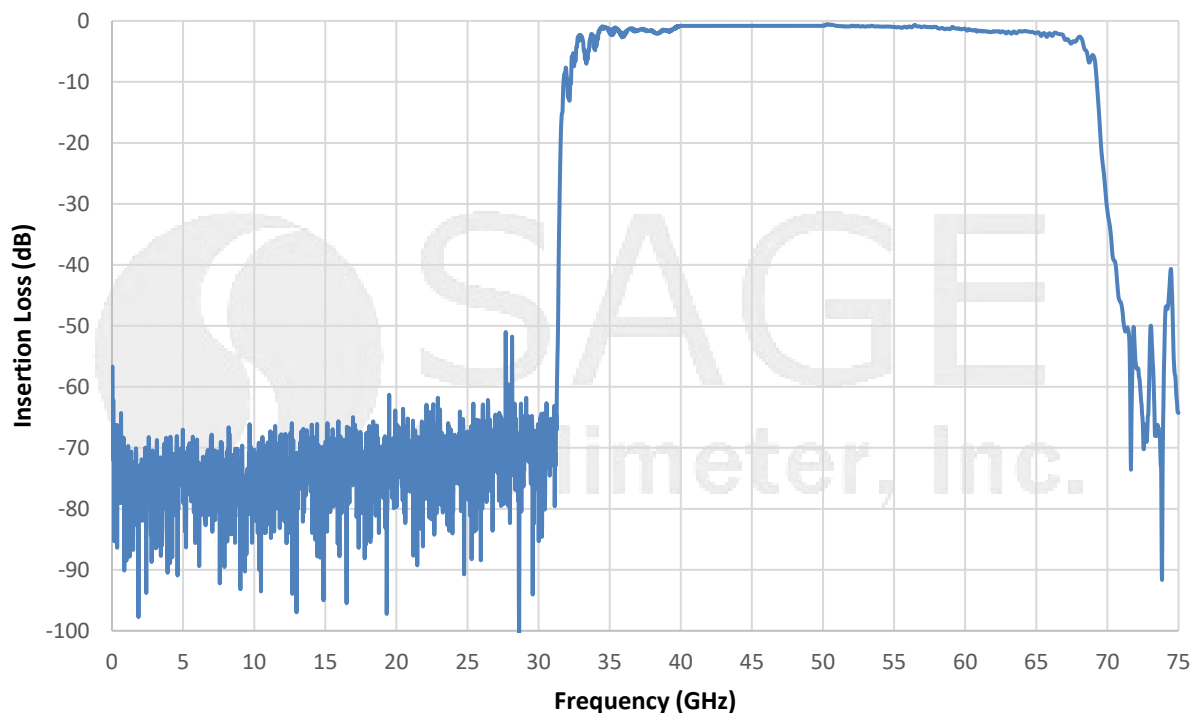
### Mechanical Specifications:

Item	Specification
Waveguide	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	4.0 Oz
Size	2.00" (L) X 1.13" (W) X 1.13" (H)
Outline	WF-BU-A-2.0

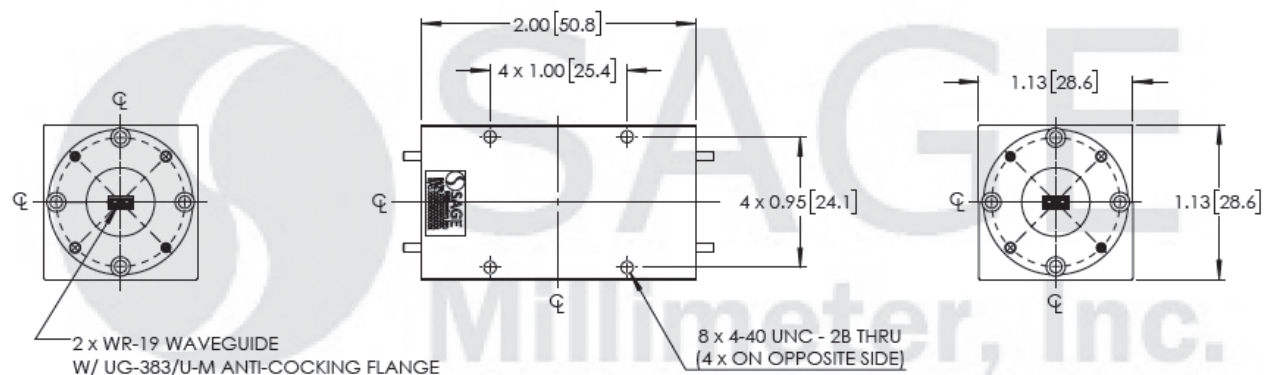


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## Typical Insertion Loss vs. Frequency



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

**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 antenna will cause performance degradation and possible device damage.

