



## Waveguide Bandpass Filter, V Band, 59 to 61 GHz

### Description:

**Model SWF-60302330-15-B1** is a V band waveguide bandpass filter with a passband frequency of 59 to 61 GHz and rejection frequencies from DC to 58 GHz and 62 to 78 GHz. The nominal insertion loss of the bandpass filter is 2.5 dB and the typical rejection is 25 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available under different model numbers.



### Features:

- Low Cost
- Low Insertion Loss
- High Rejection

### Applications:

- IEEE 802.11 ad WiGig Systems
- Communication Systems
- Radar Systems
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	59 GHz		61 GHz
Passband Insertion Loss		2.5 dB	
Passband Ripple		±0.5 dB	
Rejection Frequency, Low Side	DC		58 GHz
Rejection Frequency, High Side	62 GHz		78 GHz
Rejection		25 dB	
Passband Return Loss		15 dB	
Power Handling			100 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

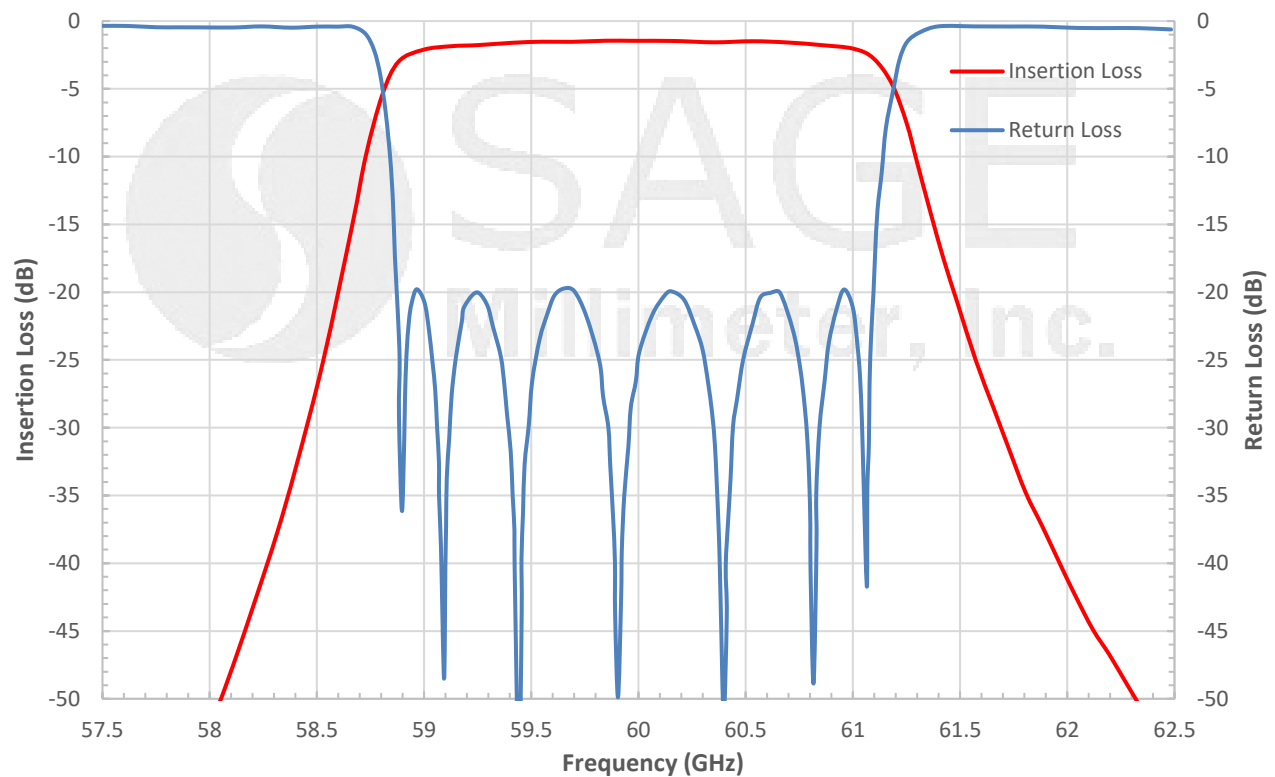
### Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-15 Waveguide with UG-385/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.20" (L) X 0.75" (Ø)
Outline	WF-BV

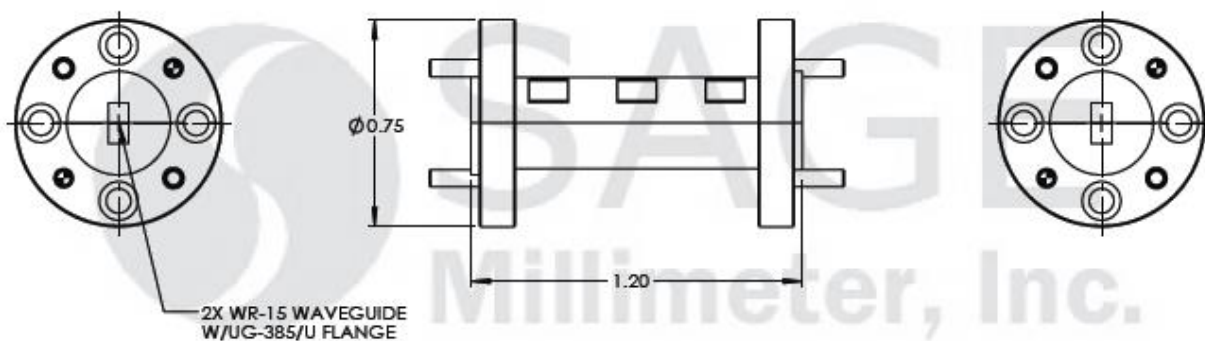


## Waveguide Bandpass Filter, V Band, 59 to 61 GHz

### Typical Performance vs. Frequency



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



#### Note:

- All data presented is simulated. Actual data may vary, slightly.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### Caution:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

