



## Waveguide Bandpass Filter, D Band

### Description:

**Model SWF-14428340-06-B1** is a D band waveguide bandpass filter with a passband frequency of 125 to 150 GHz and rejection frequencies from DC to 100 GHz and 163 to 250 GHz. The nominal insertion loss of the bandpass filter is 4.5 dB and the typical rejection is 40 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:

- Communication Systems
- Radar Systems
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	125 GHz		150 GHz
Passband Insertion Loss		4.5 dB	
Rejection Frequency, Low Side	DC		100 GHz
Rejection Frequency, High Side	163 GHz		250 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

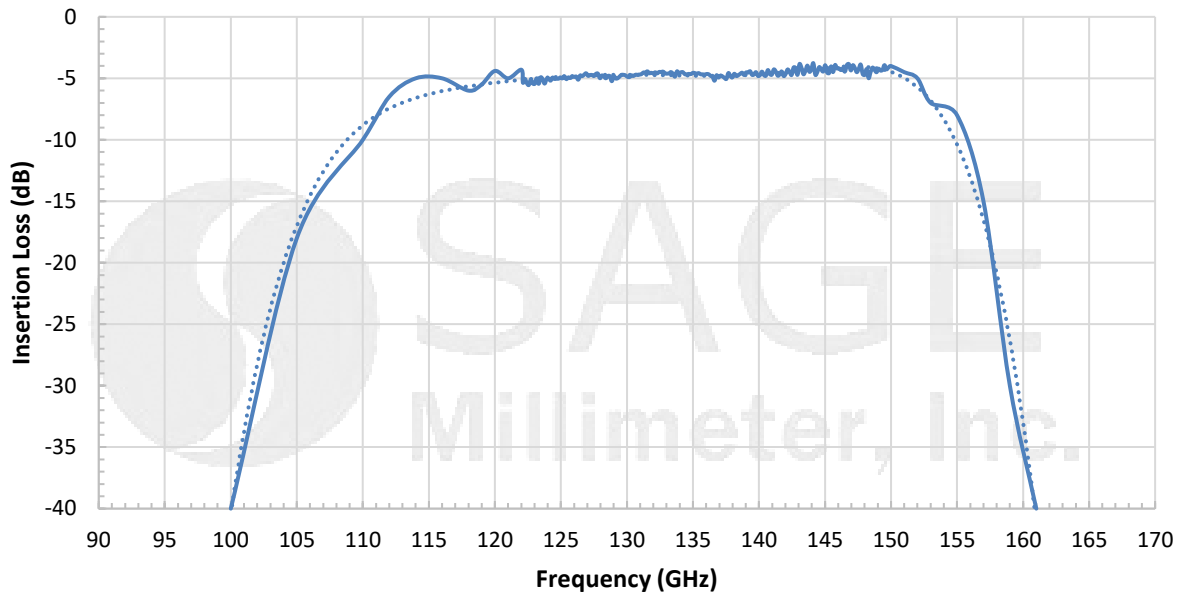
Item	Specification
Waveguide	WR-06 with UG-387/U-M Flange
Size	1.20" (L) X 0.75" (W)
Material	Brass
Finish	Gold Plated
Weight	2.2 Oz
Outline	WF-BD-L1



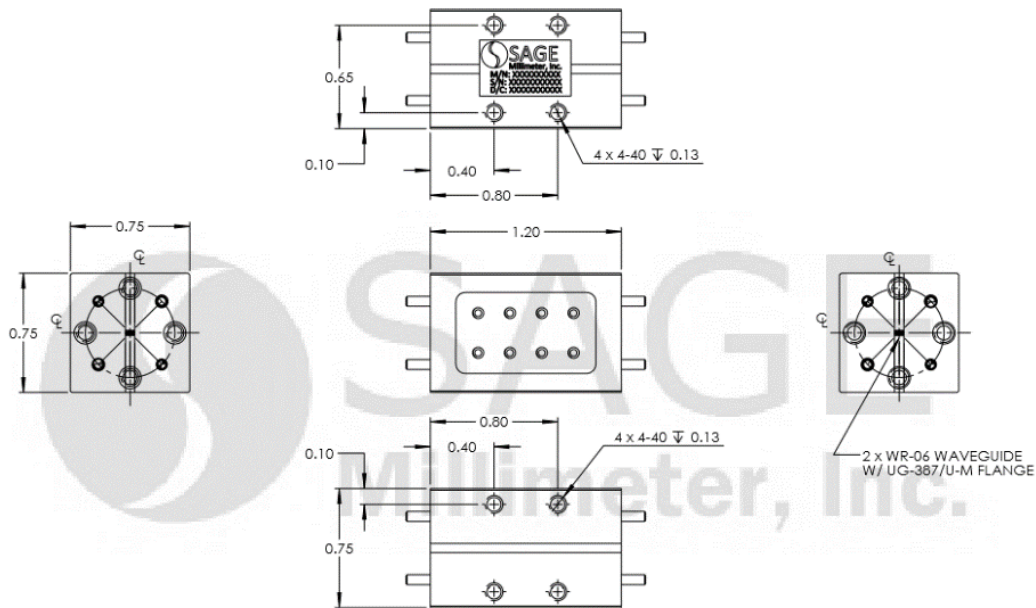


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### Typical Insertion Loss vs. Frequency



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



#### Note:

- All data are presented 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.



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