



## Waveguide Highpass Filter, D Band, 130 GHz

### Description:

**Model SWF-13413480-06-H1** is a D band waveguide highpass filter with a passband frequency of 130 GHz and higher and a rejection frequency from DC to 126 GHz. The filter provides a nominal insertion loss of 2.5 dB in its passband and a typical rejection of 80 dB at 126 GHz and below. Because the passband frequency can be set by modifying the design, other highpass filters with various passbands are offered under different model numbers.



### Features:

- Low Cost
- Low Insertion Loss
- High Rejection

### Applications:

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

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	130 GHz		>200 GHz
Passband Insertion Loss		2.5 dB	
Rejection Frequency	DC		126 GHz
Rejection		80 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

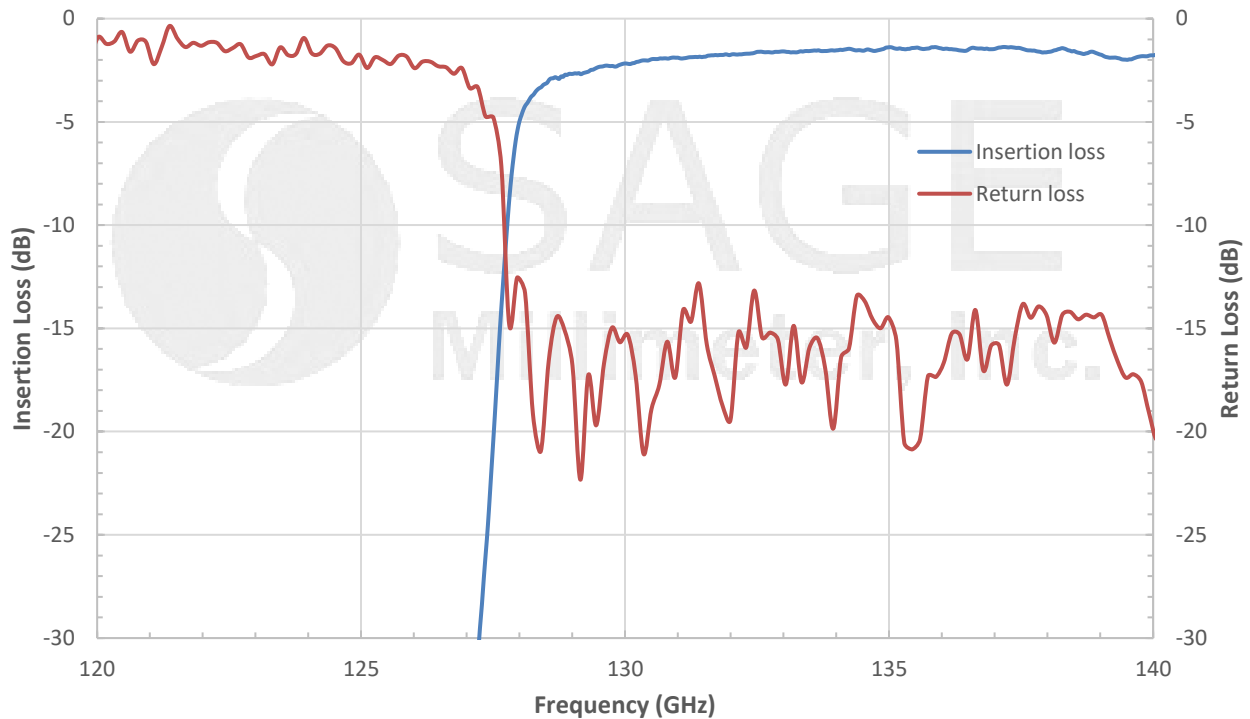
Item	Specification
RF Ports	WR-06 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.20" (L) X 0.75" (Ø)
Outline	WF-HD



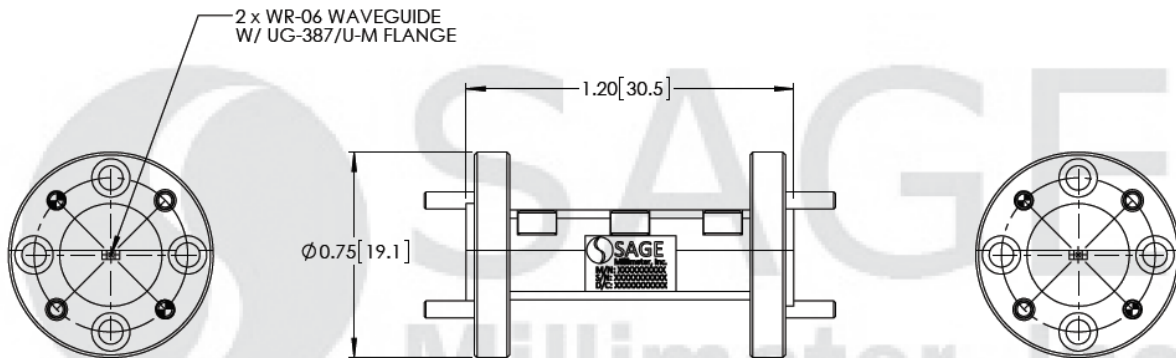


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### Typical Insertion and Return Loss vs Frequency



### 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.
- 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 cause performance degradation and possible device damage.

