

# Waveguide Highpass Filter, F Band, 129 GHz and Higher

## **Description:**

Model SWF-13412460-08-H1 is an F band waveguide highpass filter with a passband frequency of 129 GHz and higher and a rejection frequency from DC to 124 GHz. The filter provides a nominal insertion loss of 2.5 dB across its passband with a low ripple and a typical rejection of 60 dB. Since the low end cutoff frequency can be



changed by modifying the design, custom designs can be offered under different model numbers.

#### **Features:**

- Low Cost
- Low Insertion Loss
- High Rejection

### **Applications:**

- Communication Systems
- Radar Systems
- Sub-assemblies

### **Electrical Specifications:**

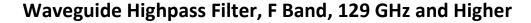
Parameter	Minimum	Typical	Maximum
Passband Frequency	129 GHz		>200 GHz
Passband Insertion Loss		2.5 dB	
Rejection Frequency	DC		124 GHz
Rejection		60 dB	7.0
Specification Temperature	_ / \	+25 °C	
Operating Temperature	-40 °C	The state of the s	+85 °C

## **Mechanical Specifications:**

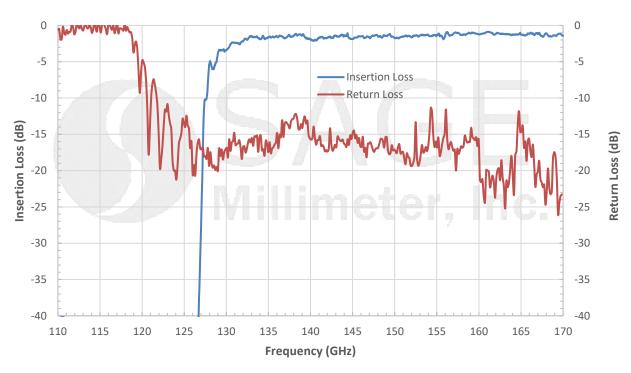
Item	Specification	
Waveguide	WR-08 with UG-387/U-M Flange	
Material	Aluminum	
Finish	Gold Plated	
Weight	0.3 Oz	
Size	1.20" (L) X 0.75" (Ø)	
Outline	WF-HF	



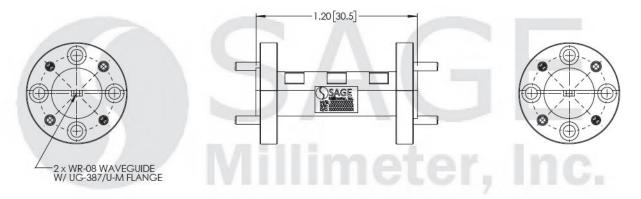
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



## **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, 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 waveguide will degrade performance and/or damage the device.



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