

# Waveguide Highpass Filter, F Band, 104 GHz and Higher

### **Description:**

Model SWF-10410440-08-H1 is an F band waveguide highpass filter with a passband frequency of 104 GHz and higher and a rejection frequency from DC to 100 GHz. The filter provides a nominal insertion loss of 2.5 dB across its passband with a low ripple and a typical rejection of 40 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:**

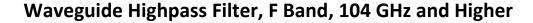
Parameter	Minimum	Typical	Maximum
Passband Frequency	104 GHz		>200 GHz
Passband Insertion Loss		2.5 dB	
Rejection Frequency	DC		100 GHz
Rejection	_ // \	40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

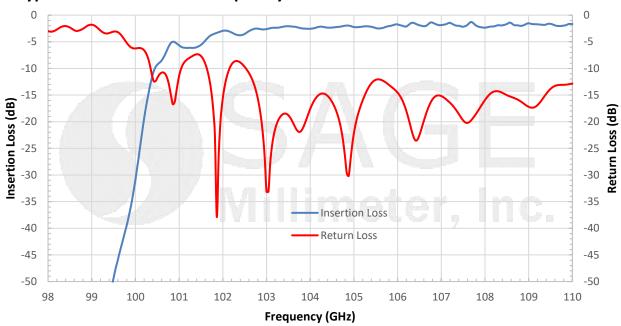
Item	Specification
Waveguide	WR-08 with UG-387/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Size	1.20" (L) X 0.75" (Ø)
Outline	WF-HF



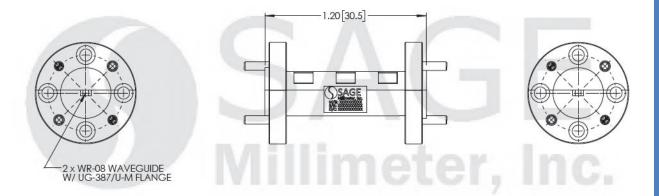
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



### **Typical Performance 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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