

# Waveguide Highpass Filter, V Band

### **Description:**

Model SWF-57356320-15-H1 is a V band waveguide highpass filter that passes the frequencies of 57 GHz and higher and a rejection frequency from DC to 56 GHz. The filter provides a nominal insertion loss of 1.0 dB across its passband with a low ripple and a typical rejection of 20 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:**

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

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	57 GHz		75 GHz
Passband Insertion Loss		1.0 dB	100
Passband Ripple	// //	±0.3 dB	
Rejection Frequency	DC		56 GHz
Rejection		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

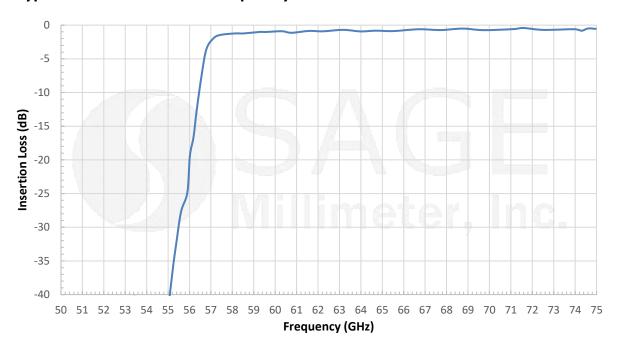
Item	Specification	
Waveguide	WR-15 with UG-385/U Flange	
Size	1.30" (L) X 0.75" (Ø)	
Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WF-HV-1.3	



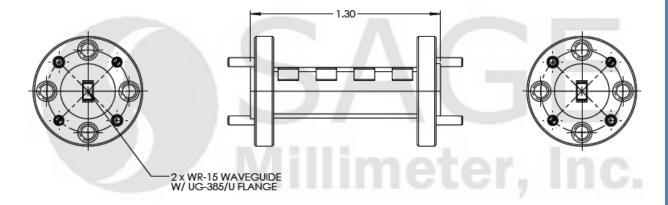
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



### **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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