

# Waveguide Highpass Filter, V Band, 63 GHz

### **Description:**

Model SWF-63357340-15-H1 is a V band waveguide highpass filter with a passband frequency of 63 GHz and higher and a rejection frequency from DC to 57 GHz. The filter provides a nominal insertion loss of 1.0 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:**

- IEEE 802.11.ab WiGig
- **Communication Systems**
- Radar Systems
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	63 GHz		
Passband Insertion Loss		1.0 dB	
Passband Ripple		±1.25 dB	
Rejection Frequency	DC		57 GHz
Rejection	// %	40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C	100	+85°C

# **Mechanical Specifications:**

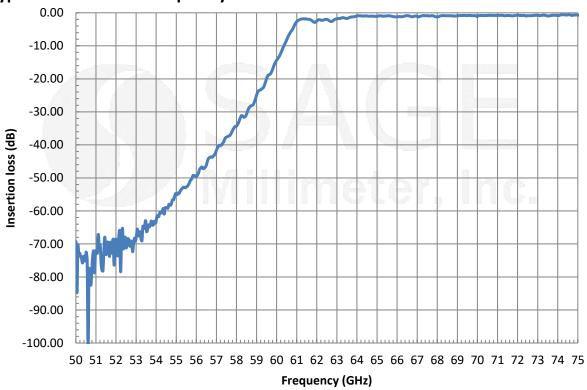
Mechanical Specifications:			
Item	Specification		
Waveguide	WR-15 with UG-385/U Flange		
Size	1.20" (L) X 0.75" (Ø)		
Material	Aluminum		
Finish	Gold Plated		
Weight	0.4 Oz		
Outline	WF-HV		



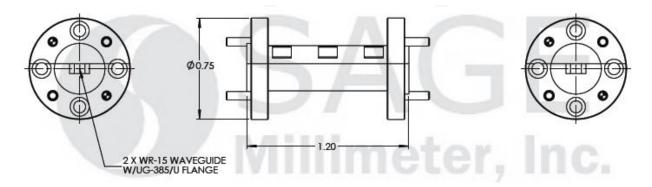
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



## **Typical Insertion vs. Frequency**



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



#### 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 cause performance degradation and possible device damage



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