# SWF-61304350-15-B1

## Waveguide Bandpass Filter, V Band, 58.6 to 63.4 GHz

### **Description:**

**Model SWF-61304350-15-B1** is a V band waveguide bandpass filter with a passband frequency of 58.6 to 63.4 GHz and rejection frequencies from DC to 56.0 GHz and 68.0 to 80.0 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the typical rejection is 50 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available 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	58.6 GHz		63.4 GHz
Passband Insertion Loss		2.0 dB	
Passband Ripple		±0.5 dB	
Rejection Frequency, Low Side	DC		56.0 GHz
Rejection Frequency, High Side	68.0 GHz		80.0 GHz
Rejection		50 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

#### **Mechanical Specifications:**

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



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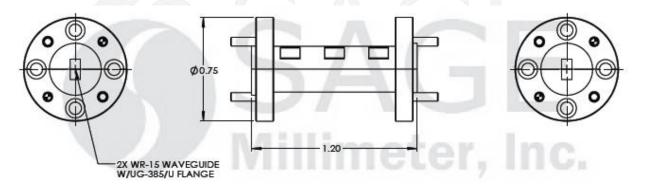
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#### 0 -5 -10 -15 -20 -25 -30 TX/RT Loss (dB) -35 -40 -45 -50 -55 -60 -65 -70 -75 -80 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 Frequency (GHz)

#### **Typical Performance vs. Frequency**

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



Note:

- All data presented is simulated. Actual data may vary, slightly.
- 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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