# SWF-42340320-22-H2

## Waveguide Highpass Filter, Q Band, Pass Frequency 41.5 GHz

#### **Description:**

**Model SWF-42340320-22-H2** is a Q band waveguide highpass filter with a passband frequency of 41.5 GHz and higher, and a rejection frequency from DC to 40 GHz. The filter provides a nominal insertion loss of 1.5 dB across its passband 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. The waveguide interface is WR-22 rectangular with UG-383/U standard flange.



#### Features:

- Low Cost
- Low Insertion Loss
- High Rejection

• 5G

Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	41.5 GHz		
Passband Insertion Loss		1.5 dB	
Rejection Frequency	DC		40 GHz
Rejection		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### **Mechanical Specifications:**

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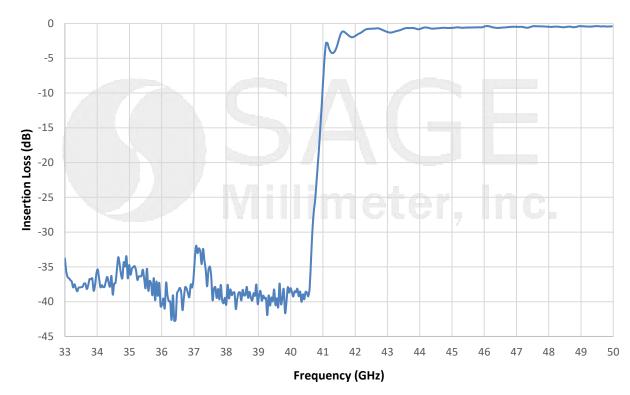
Item	Specification	
Waveguide	WR-22 with UG-383/U Flange	
Material	Aluminum	
Finish	Gold Plated	
Weight	1.6 Oz	
Size	2.40" (L) X 1.13" (Ø)	
Outline	WF-HQ-2.4-2	



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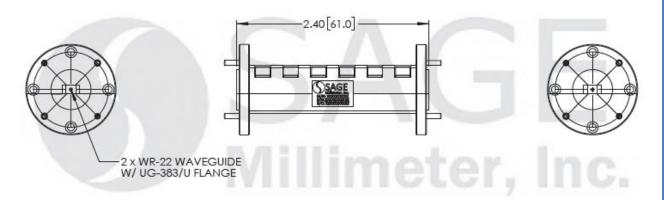
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#### **Insertion Loss vs. Frequency**

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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