

## SWF-11411440-08-H1

### Waveguide Highpass Filter, F Band, 110 GHz and Higher

**SWF-11411440-08-H1** is an F band waveguide highpass filter with a passband frequency of 110 GHz and higher and a rejection frequency from DC to 105 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.



### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	110 GHz		>200 GHz
Passband Insertion Loss		2.5 dB	
Rejection Frequency	DC		105 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

Item	Specification
Waveguide	WR-08 Waveguide 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

### ECCN

EAR99

### FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

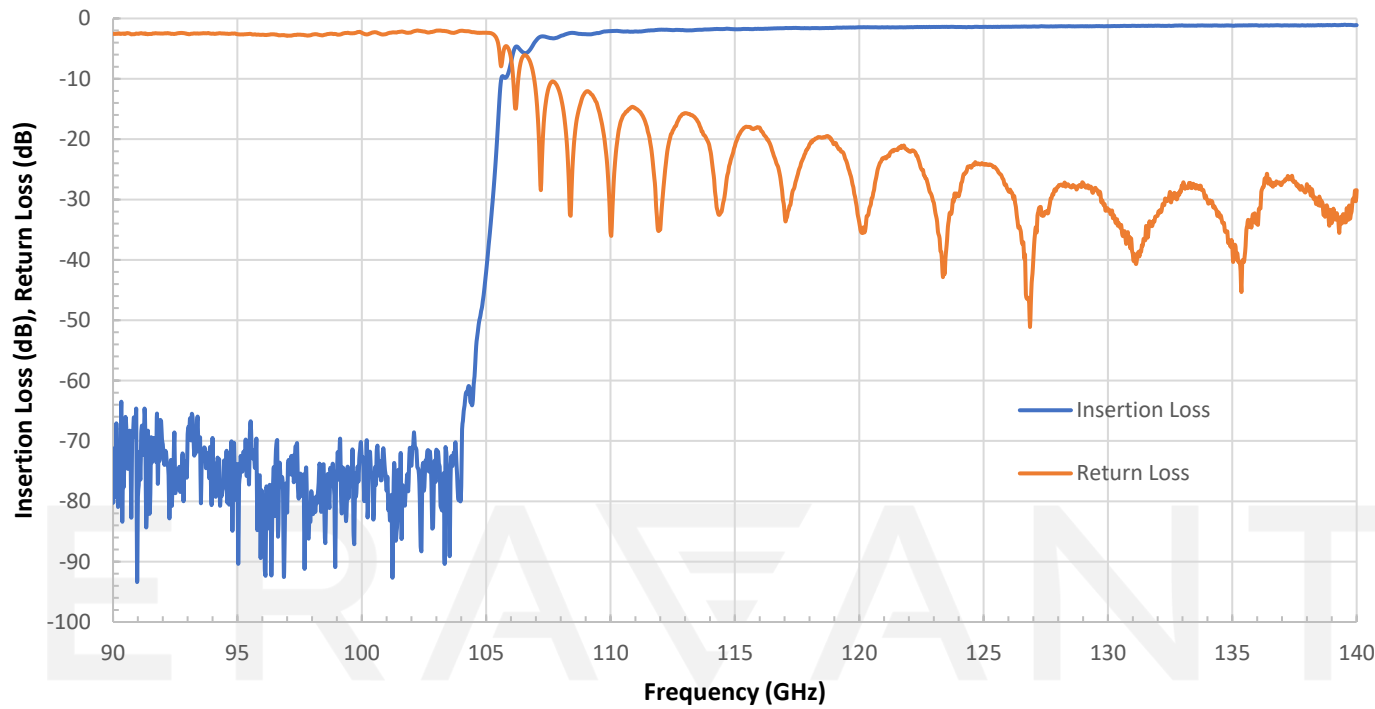
### APPLICATIONS

- Communication Systems
- Radar Systems
- Sub-assemblies

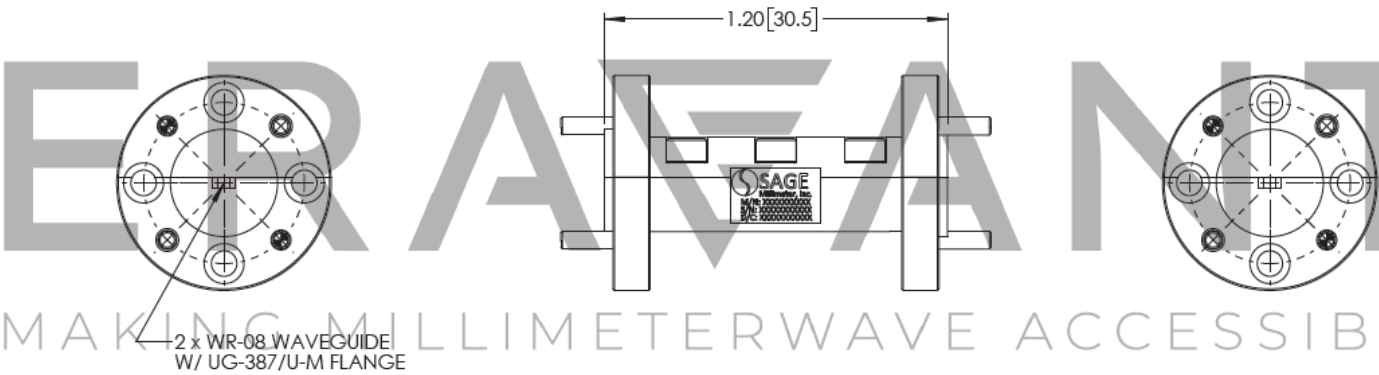
### SUPPLEMENTAL DETAILS



Typical Rejection vs Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



**NOTE:**

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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