

**Waveguide Bandpass Filter, E-Band, 70 to 90 GHz**

**SWF-80320340-12-B1** is an E band waveguide bandpass filter with a passband frequency of 70 to 90 GHz and rejection frequencies from DC to 60 GHz and 93.3 to 130 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the typical rejection is 40 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.

**Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	70 GHz		90 GHz
Passband Insertion Loss		2.0 dB	3.0 dB
Passband Ripple		±0.3 dB	
Rejection Frequency (Low Side)	DC		60 GHz
Rejection Frequency (High Side)	93.3 GHz		130 GHz
Rejection		40 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

**Mechanical Specifications:**

Item	Specification
RF Ports	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	3 Oz.
Outline	WF-BE-L1-A

**ECCN**

EAR99

**FEATURES**

- Low Cost
- Low Insertion Loss
- High Rejection

**APPLICATIONS**

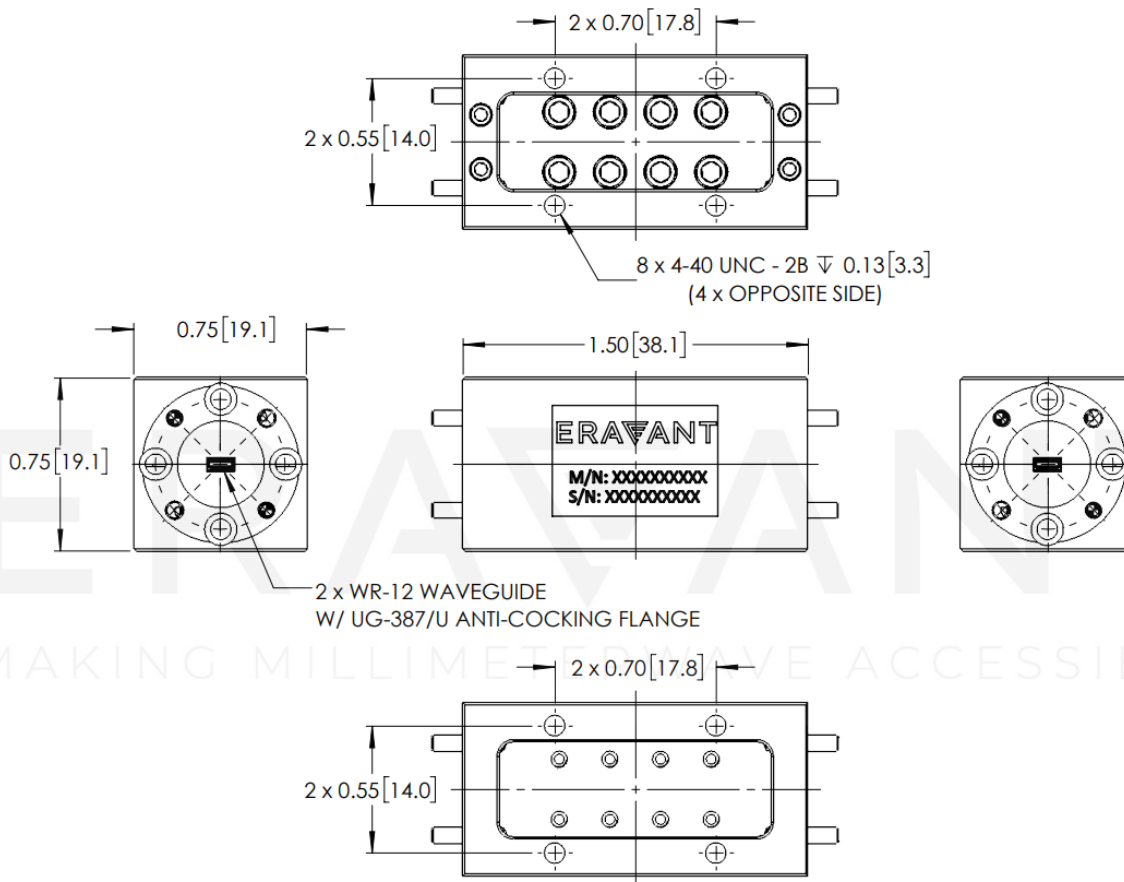
- Communication Systems
- Radar Systems
- Sub-assemblies



## SWF-80320340-12-B1

### Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



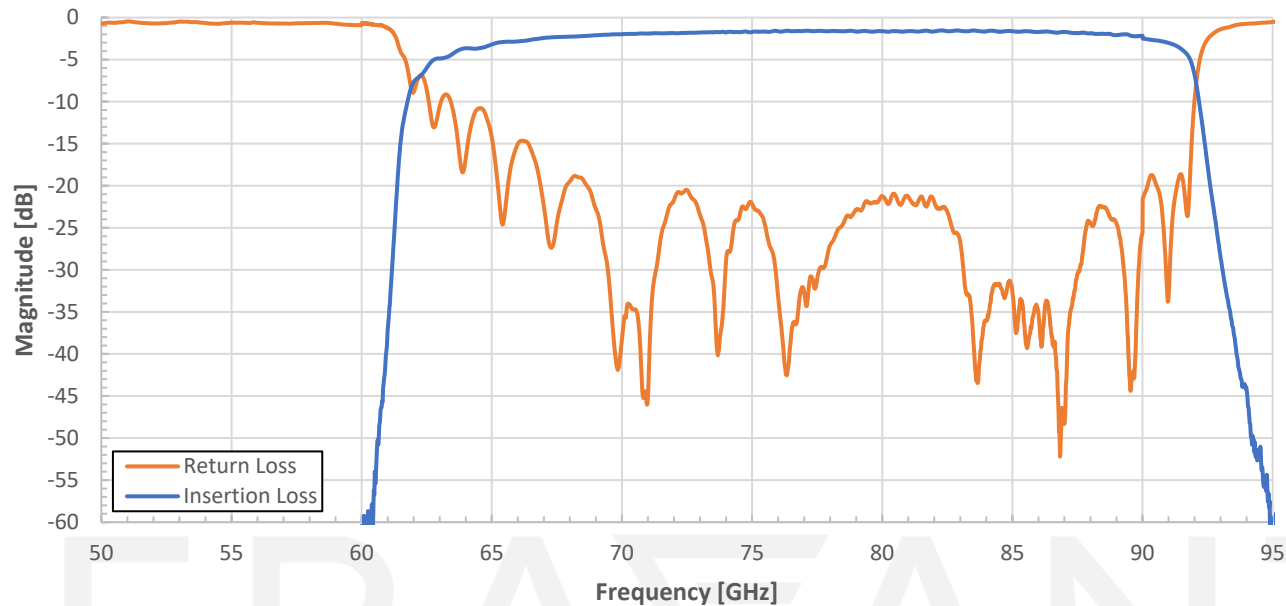
### NOTE:

- On condition that test data is provided it 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.

Typical Rejection vs Frequency



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