SWF-85305340-12-B1-WPC

Waveguide Bandpass Filter, E Band, 82.5 to 87.0 GHz

SWF-85305340-12-B1-WPC is an E band waveguide bandpass filter with a passband frequency of 82.5 to 87 GHz and rejection frequencies from DC to 80 GHz and 90 to 108 GHz. The nominal insertion loss of the bandpass filter is 2.5 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	82.5 GHz		87.0 GHz
Passband Insertion Loss		2.5 dB	3.0 dB
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	DC		80 GHz
Rejection Frequency, High Side	90 GHz		108 GHz
Rejection		40 dB	
Passband VSWR		1.5:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Waveguide	WR-12 Waveguide with UG-387/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.30” (L) x 0.75” (Ø)
Outline	WF-BE-1.3

ECCN

EAR99

FEATURES

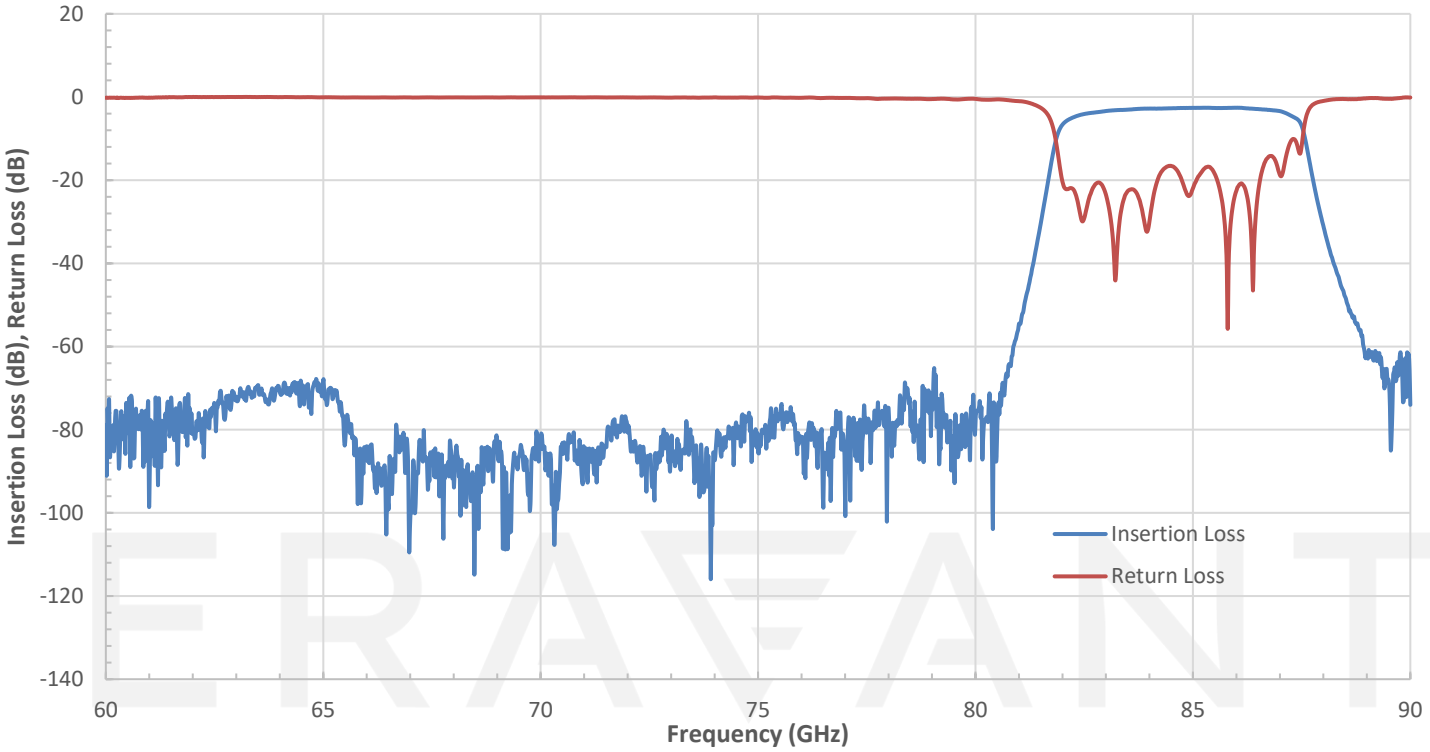
- Low Cost
- Low Insertion Loss
- High Rejection

APPLICATIONS

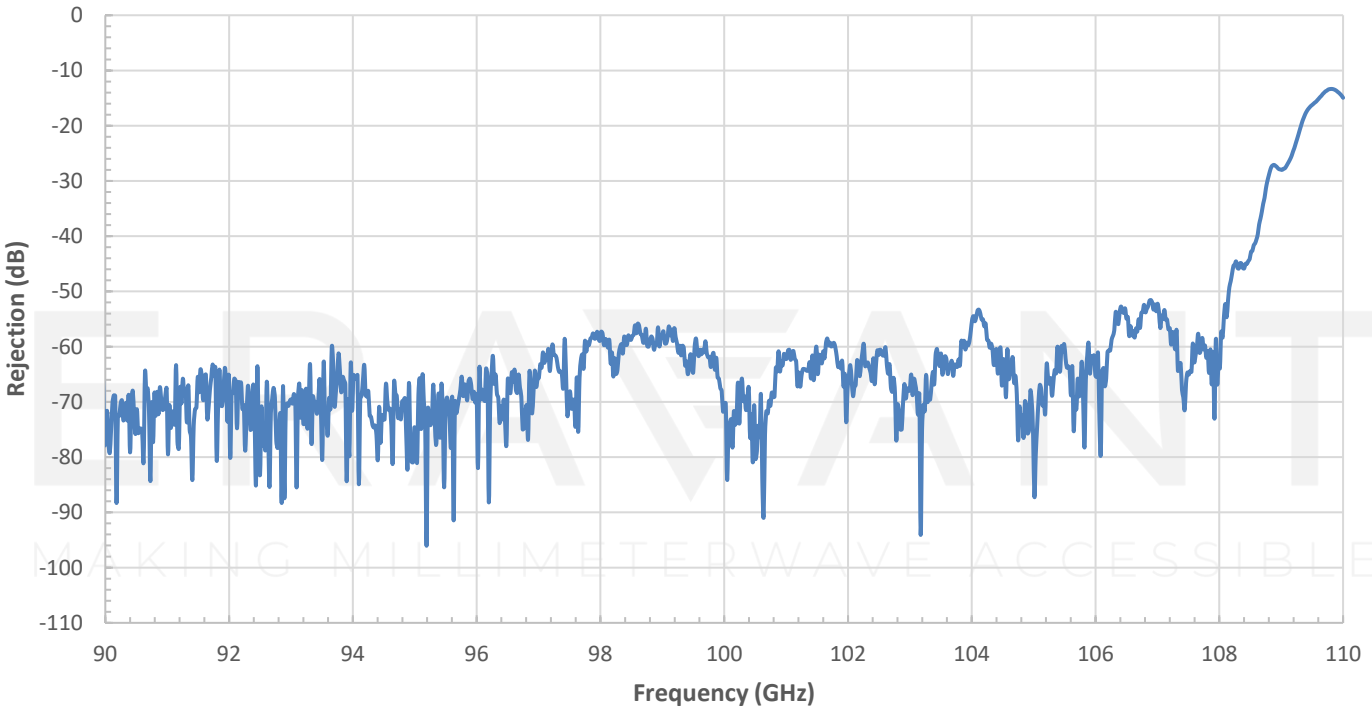
- E-Band Communication Systems
- Automotive Radar Systems
- Sub-assemblies

SUPPLEMENTAL DETAILS

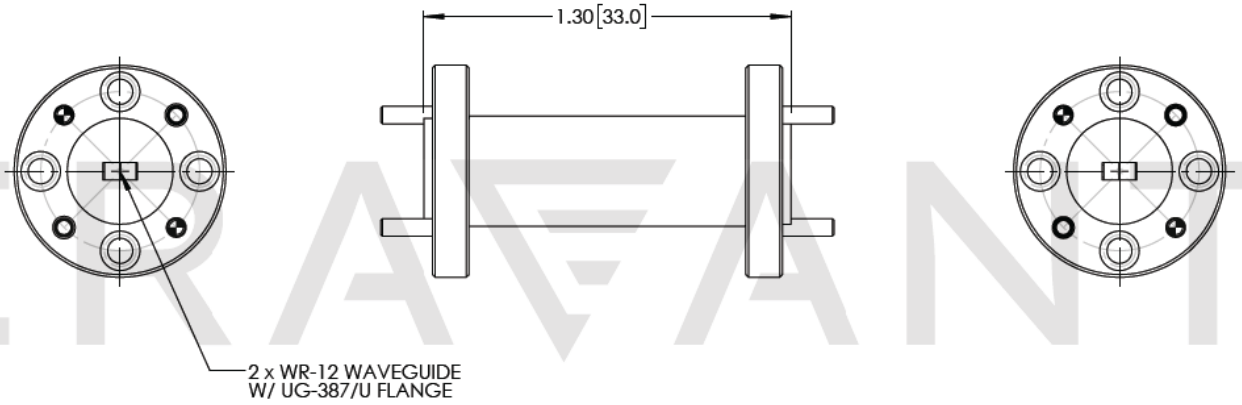
Typical Performance Vs Frequency



Typical Rejection Vs Frequency



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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.