SWF-93335340-10-B1-WPC

Waveguide Bandpass Filter, W-Band, 75 to 110 GHz

SWF-93335340-10-B1-WPC is a W band waveguide bandpass filter with a passband frequency of 75 to 110 GHz and rejection frequencies from DC to 68 GHz and 118 to 145 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	75 GHz		110 GHz
Passband Insertion Loss		2.5 dB	
Passband Ripple		±0.3 dB	
Rejection Frequency (Low Side)	DC		68 GHz
Rejection Frequency (High Side)	118 GHz		145 GHz
Rejection		40 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Waveguide	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Weight	2.1 Oz
Outline	WF-BW-A-1.6

ECCN

EAR99

FEATURES

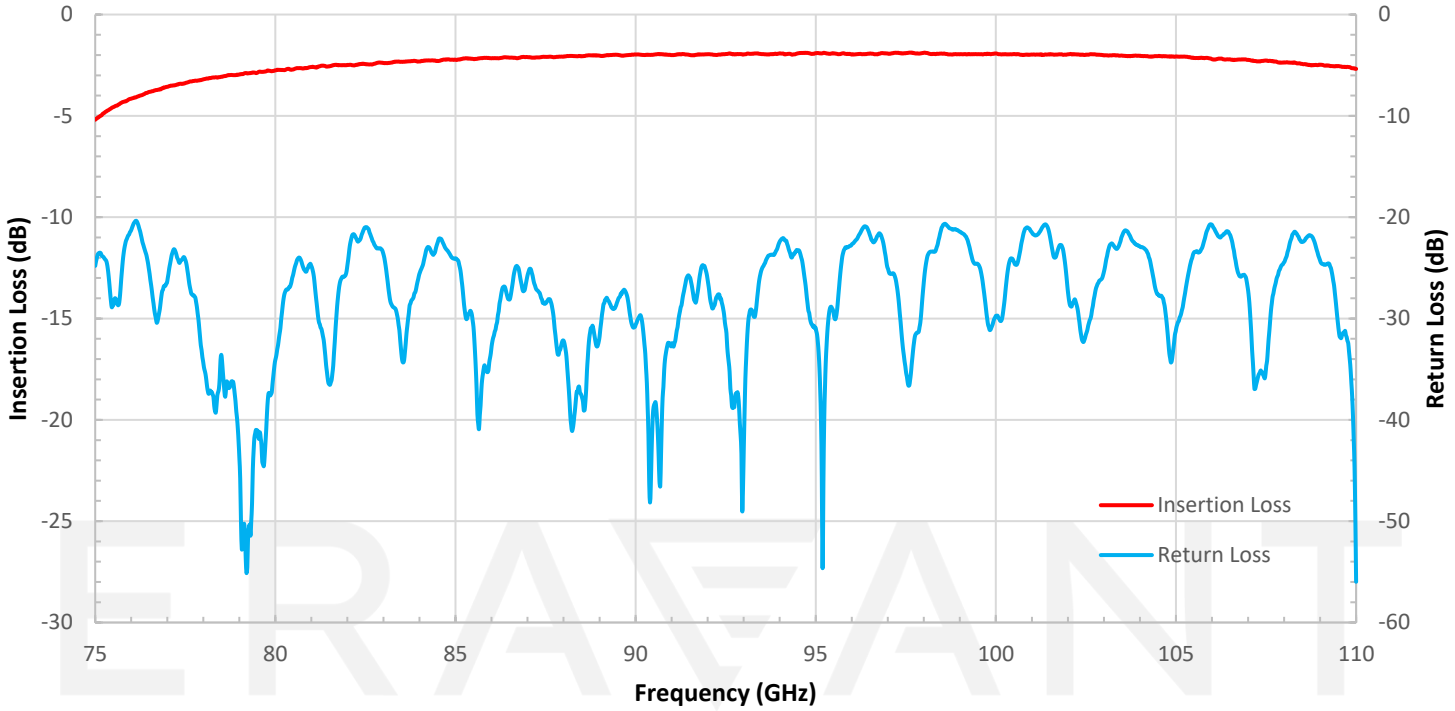
- Low Cost
- Low Insertion Loss
- High Rejection

APPLICATIONS

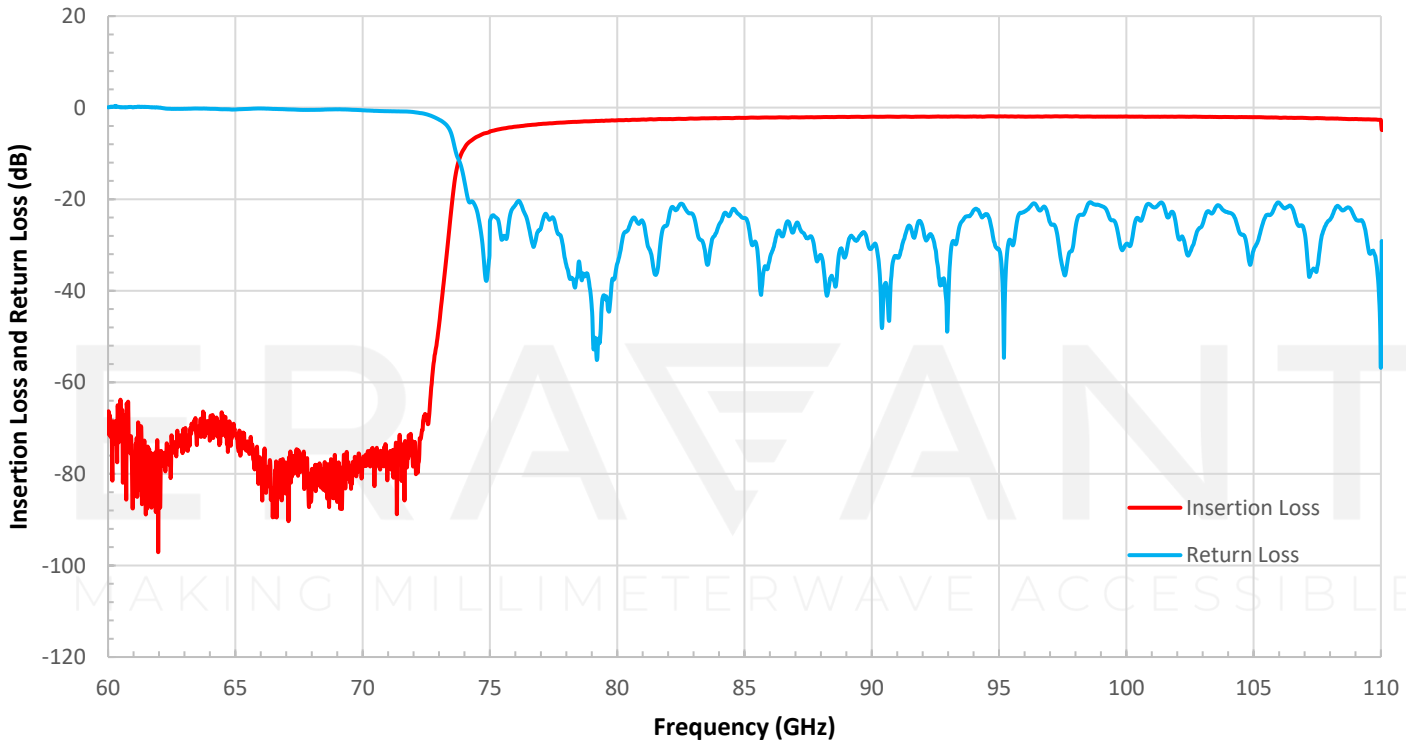
- Communication Systems
- Radar Systems
- Sub-assemblies

SUPPLEMENTAL DETAILS

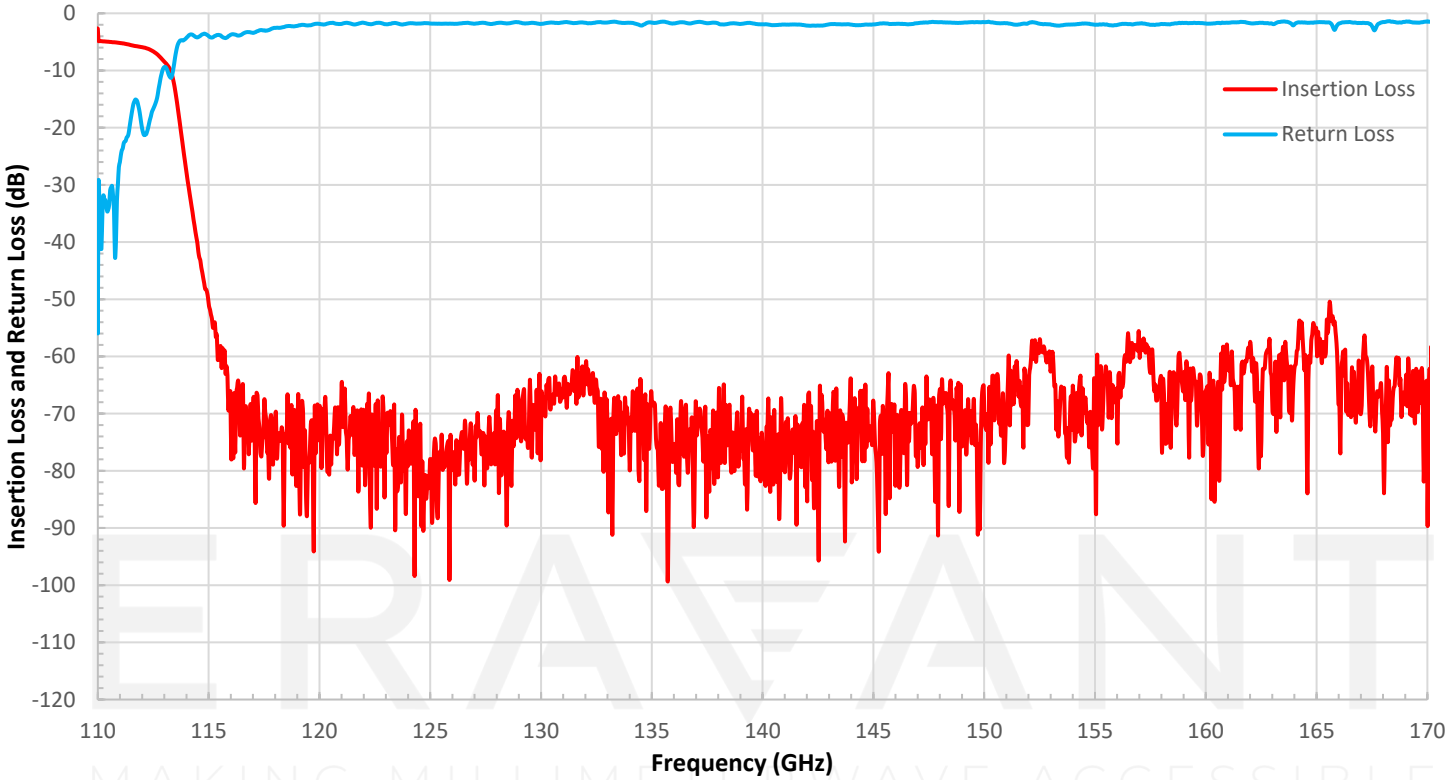
Typical Performance vs. Frequency



Measured Rejection (Low Side)

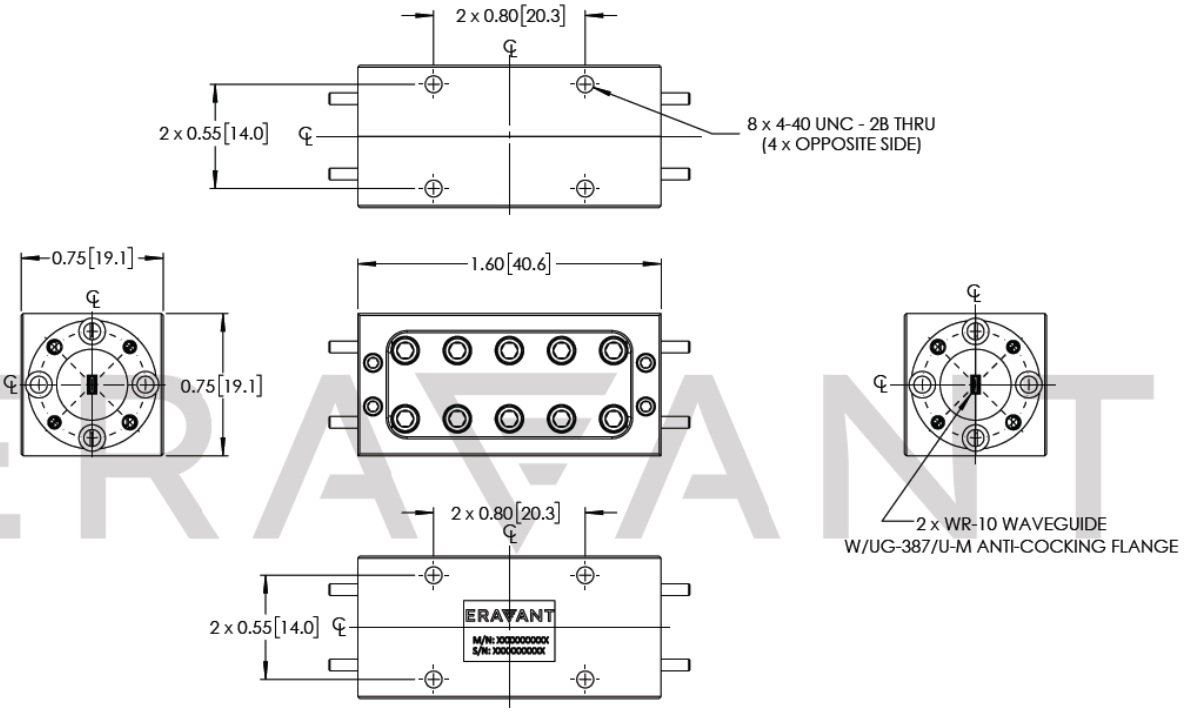


Measured Rejection (High Side)



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.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.