Waveguide Bandpass Filter, V Band, 54.5 to 56.3 GHz

SWF-56302340-15-B1 is a V band waveguide bandpass filter with a passband frequency of 54.5 to 56.3 GHz and rejection frequencies from DC to 52 GHz and 57 to 70 GHz. The nominal insertion loss of the bandpass filter is 2.5 dB and the typical rejection is 50 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	54.5 GHz		56.3 GHz
Passband Insertion Loss		2.5 dB	
Passband Ripple		± 0.3 dB	
Rejection Frequency, Low Side	DC		52 GHz
Rejection Frequency, High Side	57 GHz		70 GHz
Rejection		50 dB	
Power Handling			50 W (CW)
Specification Temperature		+25˚C	
Operating Temperature	-40˚C		+85˚C

Mechanical Specifications:

Item	Specification
Waveguide Port	WR-15 Waveguide with UG-385/U Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WF-BV-A

ECCN

EAR99

FEATURES

- Low Cost
- Low Insertion Loss
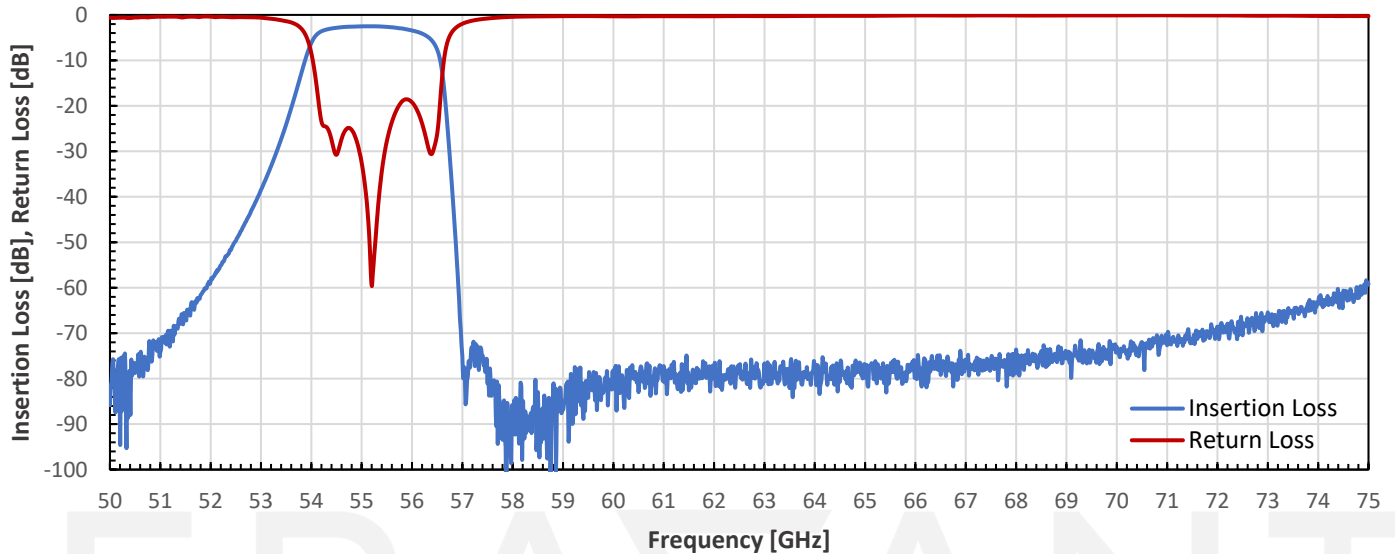- High Rejection

APPLICATIONS

- IEEE 802.11ad WiGig Systems
- Communication Systems
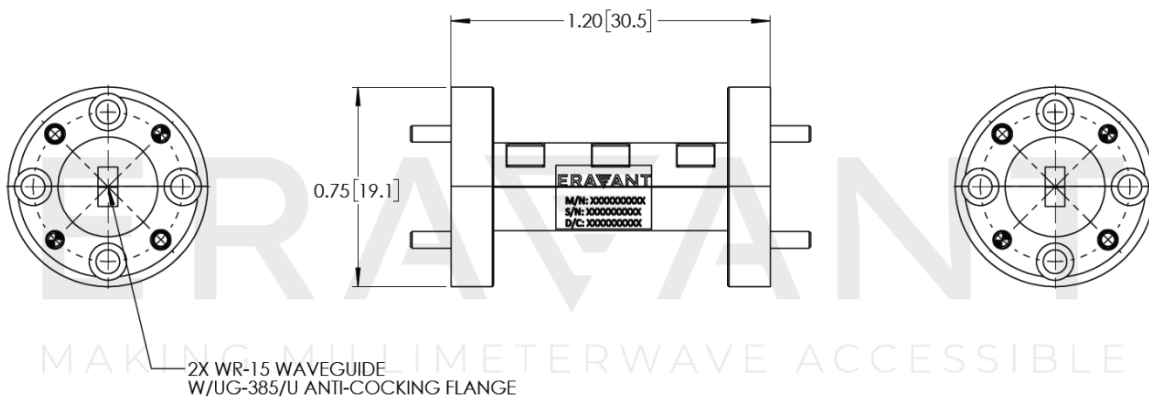- Radar Systems
- Sub-assemblies

SUPPLEMENTAL DETAILS

RoHS

Typical Rejection vs. Frequency

Mechanical Outline:

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

2X WR-15 WAVEGUIDE
W/UG-385/U ANTI-COCKING FLANGE

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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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.