

Waveguide Bandpass Filter, Q Band, 45.5 to 50.5 GHz

SWF-48305340-22-B1 is a Q band waveguide bandpass filter with a passband frequency of 45.5 to 50.5 GHz and rejection frequencies from DC to 43 GHz and 53.5 to 70 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	45.5 GHz		50.5 GHz
Passband Insertion Loss		2.0 dB	
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	DC		43 GHz
Rejection Frequency, High Side	53.5 GHz		70 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-22 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Size	2.40" (L) X 1.13" (W) X 1.13" (H)
Outline	WF-BQ-A-2.4

ECCN

EAR99

FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

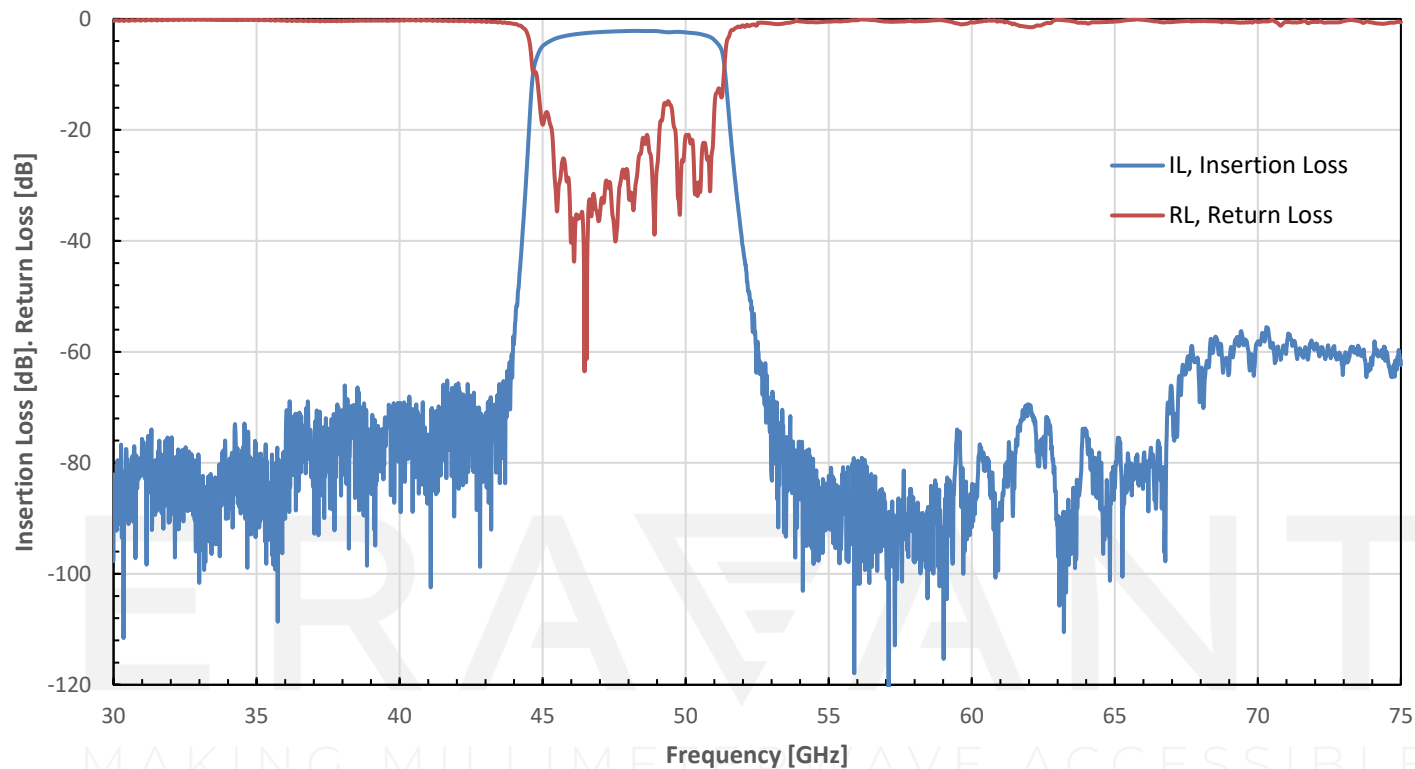
APPLICATIONS

- Communication Systems
- Radar Systems
- Sub-assemblies

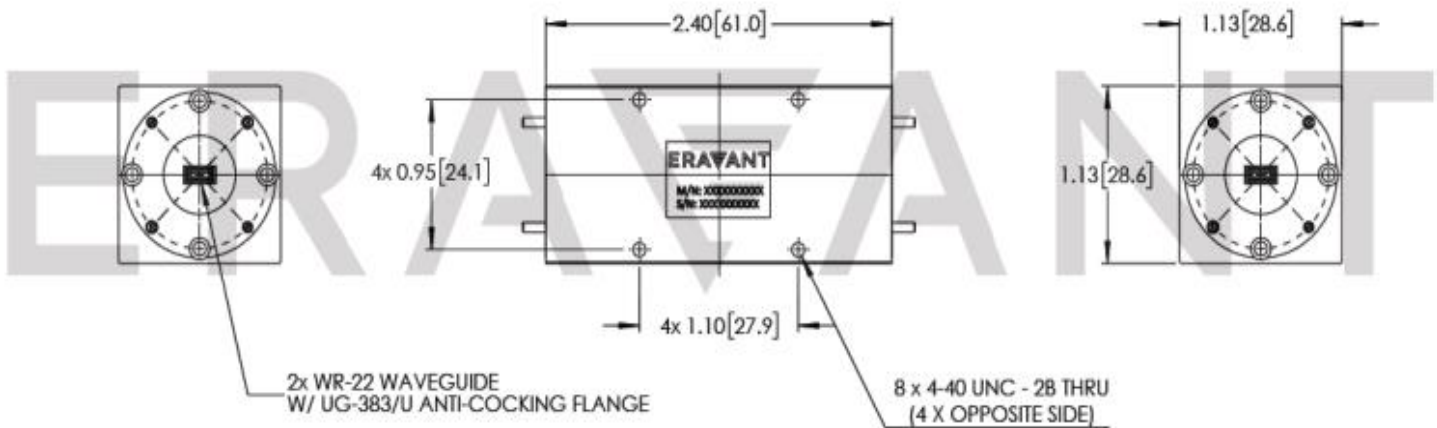
SUPPLEMENTAL DETAILS

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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.
- 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.

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