

Waveguide Bandpass Filter, Q-Band, 46 to 51 GHz

SWF-49305340-22-B1 is a Q band waveguide bandpass filter with a passband frequency of 46 to 51 GHz and rejection frequencies from DC to 43.5 GHz and 54 to 60 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB. The filter offers 40 dB minimum rejection in DC to 43.5 GHz range and 30 dB minimum rejection in 54 to 60 GHz range. 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	46 GHz		51 GHz
Passband Insertion Loss		2.0 dB	
Rejection Frequency, Low Side	DC		43.5 GHz
Rejection, Low Side	40 dB		
Rejection Frequency, High Side	54 GHz		60 GHz
Rejection, High Side	30 dB		
Passband Return Loss	14 dB		
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

APPLICATIONS

ECCN EAR99

FEATURESLow Cost

Communication Systems

Low Insertion Loss High Rejection

- Radar Systems
- Sub-assemblies

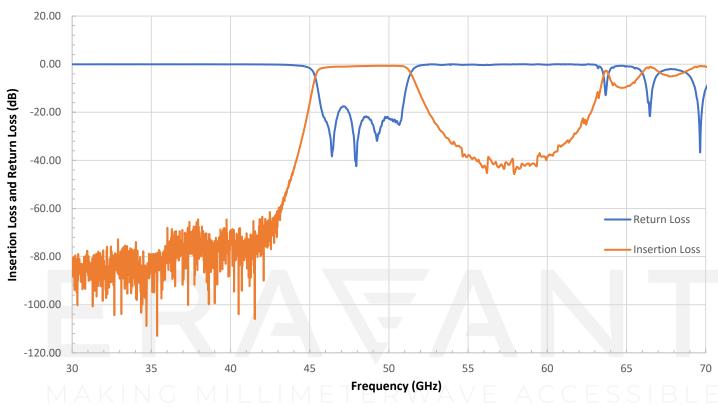
SUPPLEMENTAL DETAILS

Mechanical Specifications:

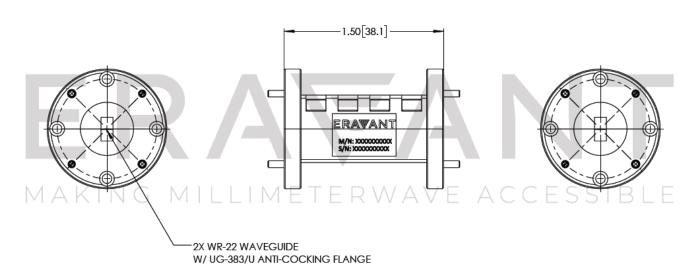
Item	Specification
Waveguide	WR-22 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Outline	WF-BQ-A



Typical Performance vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])





NOTE:

- Test data provided 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.

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