

## Waveguide Bandpass Filter, Q-Band, 37 to 42 GHz

**SWF-40305340-22-B1** is a Q band waveguide bandpass filter with a passband frequency of 37 to 42 GHz and rejection frequencies from DC to 34 GHz, 46 to 60 GHz, and 60 to 75 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB. The filter offers 40 dB minimum rejection in DC to 37 GHz range, 40 dB minimum rejection in 45 to 60 GHz range, and 35 dB minimum rejection in 60 to 75 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	37 GHz		42 GHz
Passband Insertion Loss		2.0 dB	2.5 dB
Rejection, DC to 34 GHz	40 dB		
Rejection, 46 to 60 GHz	40 dB		
Rejection, 60 to 75 GHz	35 dB		
Passband Return Loss	14 dB		
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### **ECCN**

EAR99

## **FEATURES**

- Low Cost
- Low Insertion Loss
- High Rejection

### **APPLICATIONS**

- Communication Systems
- Radar Systems
- Sub-assemblies

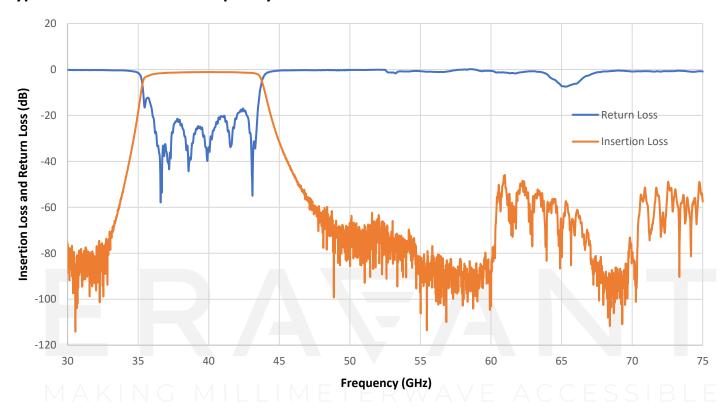
## Mechanical Specifications:

Item	Specification
Waveguide	WR-22 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Outline	WF-BQ-L1-A

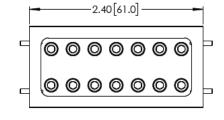


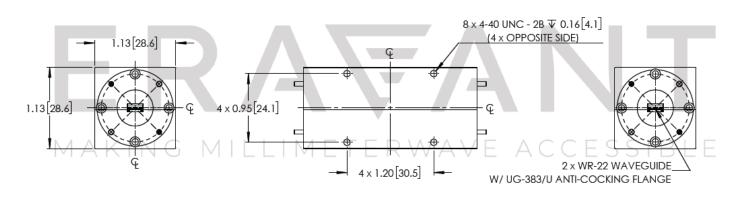


## **Typical Performance vs. Frequency**



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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