

# Waveguide Bandpass Filter, D Band, 125 to 150 GHz

**SWF-14428340-06-B1** is a D band waveguide bandpass filter with a passband frequency of 125 to 150 GHz and rejection frequencies from DC to 100 GHz and 163 to 250 GHz. The nominal insertion loss of the bandpass filter is 4.5 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 Range	125 GHz		150 GHz
Passband Insertion Loss		4.5 dB	
Rejection Frequency, Low Side	DC		100 GHz
Rejection Frequency, High Side	163 GHz		250 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

Item	Specification		
Waveguide	WR-06 Waveguide with UG-387/U-M Anti-Cocking Flange		
Material	Brass		
Finish	Gold Plated		
Weight	2.2 Oz		
Outline	WF-BD-L1-A		

#### **ECCN**

EAR99

### **FEATURES**

- Low Cost
- Low Insertion Loss
- High Rejection

#### **APPLICATIONS**

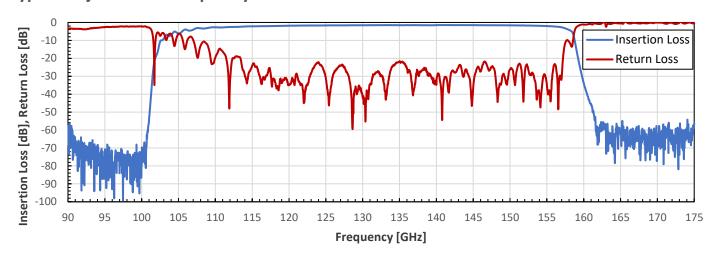
- Communication Systems
- Radar Systems
- Sub-assemblies

#### **SUPPLEMENTAL DETAILS**



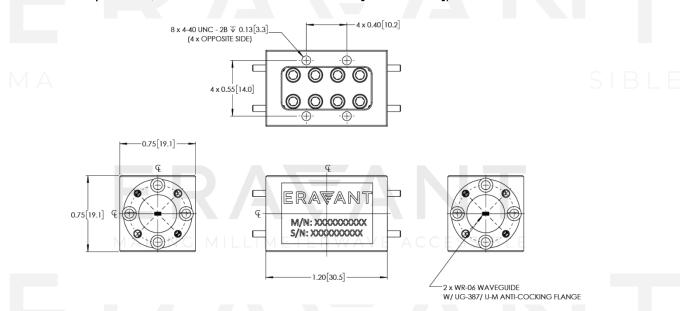
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# Typical Rejection vs. Frequency



## **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.