# SWF-48312340-19-B1

# Waveguide Bandpass Filter, U Band, 42 to 54 GHz

**SWF-48312340-19-B1** is a U band waveguide bandpass filter with a passband frequency of 42 to 54 GHz and rejection frequencies from DC to 38 GHz and 57 to 90 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 40 dB. Since passband frequency can be selected by modifying the design, custom designs are available under different model numbers.

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency Range	42 GHz		54 GHz
Passband Insertion Loss		1.5 dB	
Rejection Frequency, Low Side	DC		38 GHz
Rejection Frequency, High Side	57 GHz		90 GHz
Rejection		40 dB	
Passband Return Loss		14 dB	
Power Handling			100 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

Item	Specification
Waveguide	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	10 Oz
Outline	WF-BU-A-2.25

# ECCN EAR99

### FEATURES

- Low Insertion Loss
- High Rejection

# APPLICATIONS

- IEEE 802.11ad WiGig Systems
- Test Labs
- Instrumentations
- Sub-assemblies

### SUPPLEMENTAL DETAILS

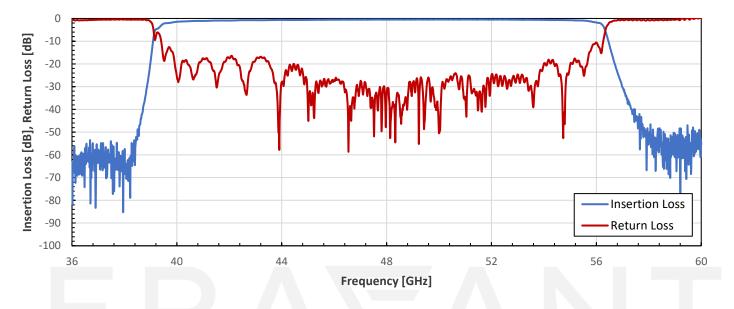


# ERAWANT

# SWF-48312340-19-B1

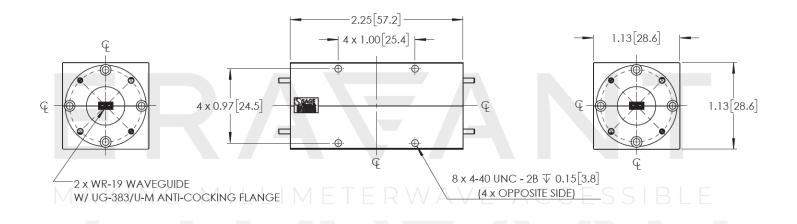
# ERA\ANT

# **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.