

# U-Band Waveguide, Lowpass Filter, 36 to 57 GHz

**SWF-57368330-19-L1-WP** is an U band waveguide lowpass filter with a passband frequency from 36 to 57 GHz and a rejection frequency 68 to 120 GHz. Due to the waveguide cut off nature, the low side of the filter has rejection range of DC to 30 GHz. The filter provides a nominal insertion loss of 2 dB across its passband and a typical rejection of 30 dB. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers.



# **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	36 GHz		57 GHz
Passband Insertion Loss		2 dB	
Rejection Frequency, Low Side	DC		30 GHz
Rejection Frequency, High Side	68 GHz		120 GHz
Rejection		30 dB	
Passband Return Loss		14 dB	
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
Size	2.00" (L) x 1.13" (W) x 1.13" (H)
Outline	WF-LU-A

### **ECCN**

EAR99

## **FEATURES**

- Low Insertion Loss
- High Rejection

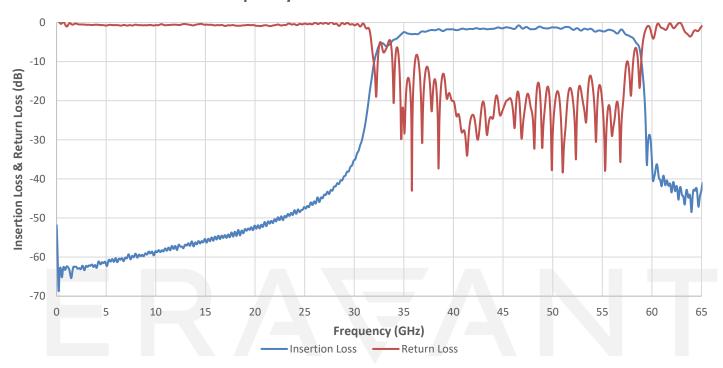
## **APPLICATIONS**

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

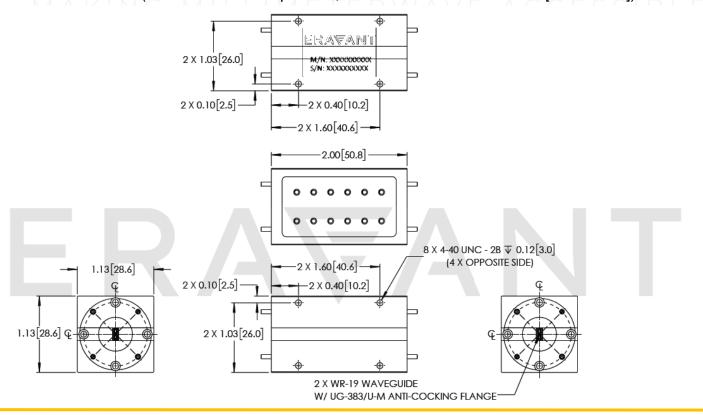
### SUPPLEMENTAL DETAILS



# **Measured Performance 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.
- 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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