

# U Band Waveguide Lowpass Filter, 36 to 60 GHz

### **Description:**

**Model SWF-60364340-19-L1** is an U band waveguide lowpass filter with a passband frequency from 36 to 60 GHz and a rejection frequency from 66 to 120 GHz. Due to the waveguide cut off nature, the low side of the filter has rejection range of DC to 29 GHz. The filter provides a nominal insertion loss of 1.5 dB across its passband and a typical rejection of 40 dB. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers.



#### **Features:**

- Low Insertion Loss
- High Rejection

### **Applications:**

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

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	36 GHz		60 GHz
Passband Insertion Loss		1.5 dB	
Rejection Frequency, Low Side	DC		29 GHz
Rejection Frequency, High Side	66 GHz		120 GHz
Rejection		40 dB	
Passband VSWR		1.5:1	
Power Handling (CW)			100 Watts
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## **Mechanical Specifications:**

Item	Specification
Waveguide	WR-19 Waveguide with UG-383/U-M Flange
Material	Brass
Finish	Gold Plated
Weight	4.0 Oz
Size	2.40" (L) X 1.125" (W) X 1.125" (H)
Outline	WF-LU

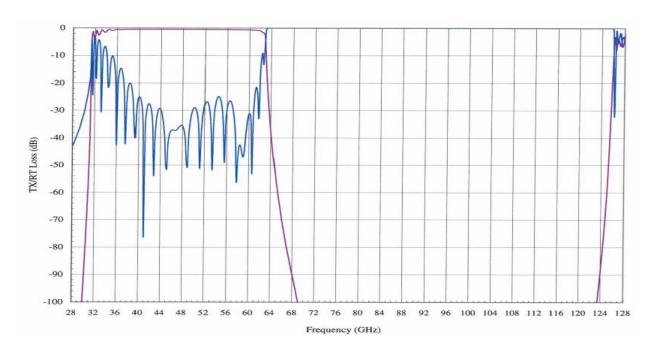


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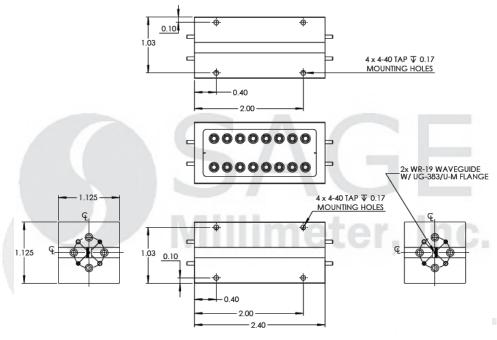


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#### **Simulated Data**



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



#### Note:

SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

• Any foreign objects in the waveguide will degrade performance and/or damage the device.



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