# SWF-60390350-28-L1

# Ka Band Waveguide, Lowpass Filter, 24.0 to 60.0 GHz

## **Description:**

**Model SWF-60390350-28-L1** is a Ka band waveguide lowpass filter with a passband frequency from 24 to 60 GHz and a rejection frequency 90 to 140 GHz. Due to the waveguide cut off nature, the low side of the filter has rejection range of DC to 20 GHz. The filter provides a nominal insertion loss of 1.0 dB across its passband and a typical rejection of 50 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:**

- Test Labs
- Instrumentations
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	26 GHz		60 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency, Low Side	DC		20 GHz
Rejection Frequency, High Side	90 GHz		140 GHz
Rejection		50 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### **Mechanical Specifications:**

Item	Specification		
Waveguide	WR-28 Waveguide with UG-599/U Flange	1.1	
Size	2.20" (L) X 0.75" (W) x 0.75" (H)		
Material	Brass	7	
Finish	Gold Plated		
Weight	2.8 Oz		
Outline	WF-LA		



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#### 0 X -10 -20 -30 -40 TX/RT Loss (dB) -50 -60 -70 -80 -90 -100 -110 -120 25 75 105 35 45 55 65 85 95 115 125 135 155 145 Frequenmcy (GHz)

### **Simulated Data**

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

2.20 0 0000000000 O ò 0.75 0000000000 O 8x Ø0.116 THRU (4 ON EACH FLANGE) ( |(2x WR-28 WAVEGUIDE W/ UG-599/U FLANGE 0.75 О  $\bigcirc$ 

#### Note:

• All data presented is simulated. Actual data may vary.



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• 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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