# SWF-27310340-28-B1

## Waveguide Bandpass Filter, Ka Band, 22.0 to 32.0 GHz

#### **Description:**

**Model SWF-27310340-28-B1** is a Ka band waveguide bandpass filter with a passband frequency from 22 to 32 GHz and a rejection frequencies of 1 kHz to 18 GHz and 37 to 75 GHz, respectively. The filter provides a nominal insertion loss of 1.0 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:

- Test Labs
- Instrumentations
- Sub-assemblies

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	22.0 GHz		32.0 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency, Low Side	1 kHz		18.0 GHz
Rejection Frequency, High Side	37.0 GHz		75.0 GHz
Rejection		40 dB	
Passband VSWR			1.5:1
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

#### **Mechanical Specifications:**

Item	Specification
Waveguide	WR-28 Waveguide with UG-599/U Flange
Size	3.60" (L) X 0.75" (W) x 0.75" (H)
Material	Brass
Finish	Gold Plated
Weight	8.7 Oz
Outline	WF-LA-3.6



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#### Simulated Data:



Frequency (GHz)

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



RoHS

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Note:

- All data are presented by using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C case temperature.
- 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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