# SWF-32320360-28-B1

### Ka Band Waveguide, Bandpass Filter, 22 to 42 GHz

#### **Description:**

**Model SWF-32320360-28-B1** is a Ka band waveguide bandpass filter with a passband frequency from 22 to 42 GHz and the rejection frequencies of 1 kHz to 18 GHz and 48 to 90 GHz, respectively. The filter provides a nominal insertion loss of 1.2 dB across its passband and a typical rejection of 60 dB. Since both low and high end cutoff frequencies 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 GHz  |         | 40 GHz  |
| Passband Insertion Loss        |         | 1.2 dB  | 2.0 dB  |
| Rejection Frequency, Low Side  | DC      |         | 20 GHz  |
| Rejection Frequency, High Side | 48 GHz  |         | 95 GHz  |
| Rejection                      |         | 60 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      | 2.20" (L) X 0.75" (W) x 0.75" (H)    |  |
| Material  | Brass                                |  |
| Finish    | Gold Plated                          |  |
| Weight    | 2.8 Oz                               |  |
| Outline   | WF-LA                                |  |



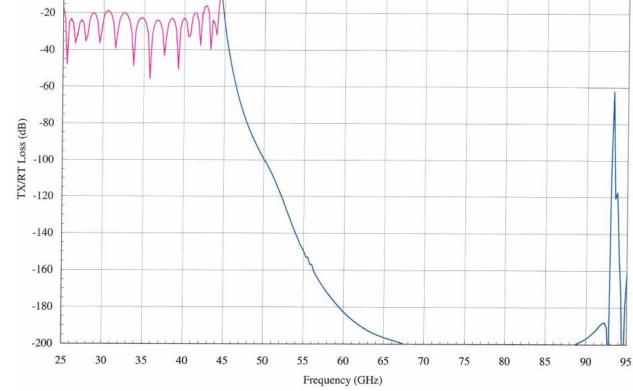
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RoHS

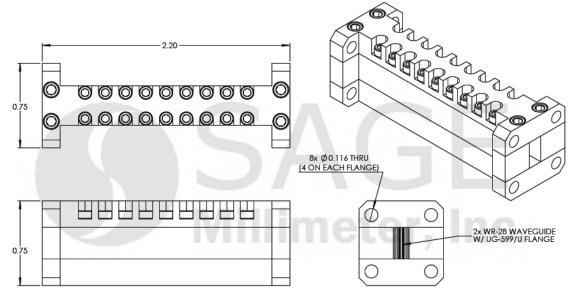
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## Simulated Results

0



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



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Note:

- All data presented are simulated. 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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