



## 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 rejection frequencies from DC to 20 GHz and 48 to 85 GHz. 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		42 GHz
Passband Insertion Loss		1.2 dB	2.0 dB
Rejection Frequency, Low Side	DC		20 GHz
Rejection Frequency, High Side	40 GHz		85 GHz
Rejection		60 dB	
Return Loss		14 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

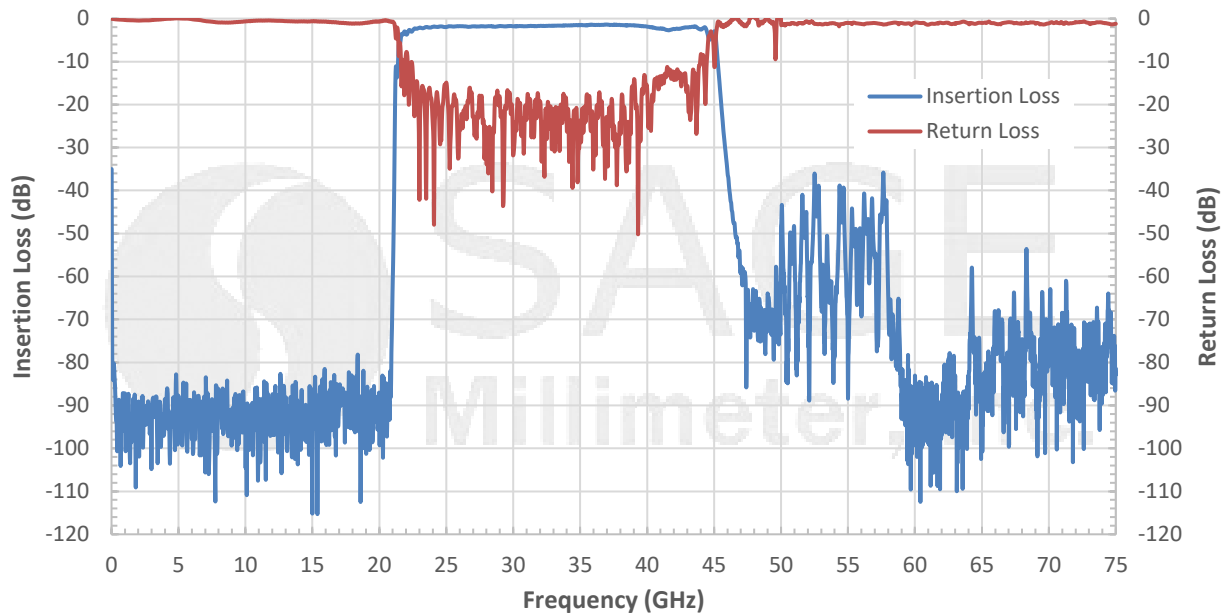
Item	Specification
Waveguide	WR-28 Waveguide with UG-599/U Flange
Material	Brass
Finish	Gold Plated
Weight	10.0 oz.
Outline	WF-BA-3.8



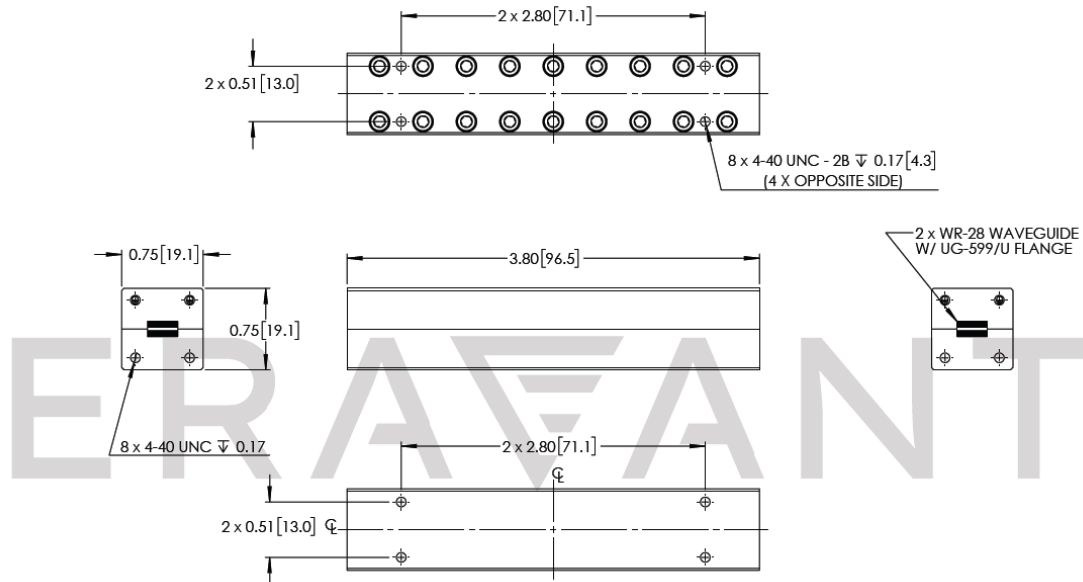


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### Typical Performance vs Frequency



### Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- 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 cause performance degradation and possible device damage.

