

## Waveguide Dual Bandpass Filter, Ka Band, 28 GHz and 39 GHz

### Description:

**Model SWF-28301340-28-B1-D-WP** is a Ka band waveguide, dual bandpass filter with passband frequencies from 27.5 to 28.5 GHz and 38.0 GHz to 40.0 GHz and rejection frequencies from DC to 25.5 GHz, 31 to 35.5 GHz, and 42 to 49 GHz. The filter is designed for 5G frequency band, 28 GHz and 39 GHz system applications, particularly. The nominal insertion loss of the bandpass filter is 3.0 dB and the typical rejection is 40 dB. Since the passband frequencies can be changed by modifying the design, custom designs can be offered under different model numbers.



### Features:

- Dual Passband, 28 GHz and 39 GHz
- Waveguide Interface
- High Rejection

### Applications:

- 5G Systems
- Communication Systems
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency 1	27.5 GHz	28.0 GHz	28.5 GHz
Passband Frequency 2	38.0 GHz	39.0 GHz	40.0 GHz
Passband Insertion Loss		3.0 dB	
Passband Ripple		±0.5 dB	
Rejection Frequency 1	DC		25.5 GHz
Rejection Frequency 2	31 GHz		35.5 GHz
Rejection Frequency 3	42.0 GHz		49.0 GHz
Rejection		40 dB	
Passband VSWR		1.5:1	
Power Handling			100 Watts
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

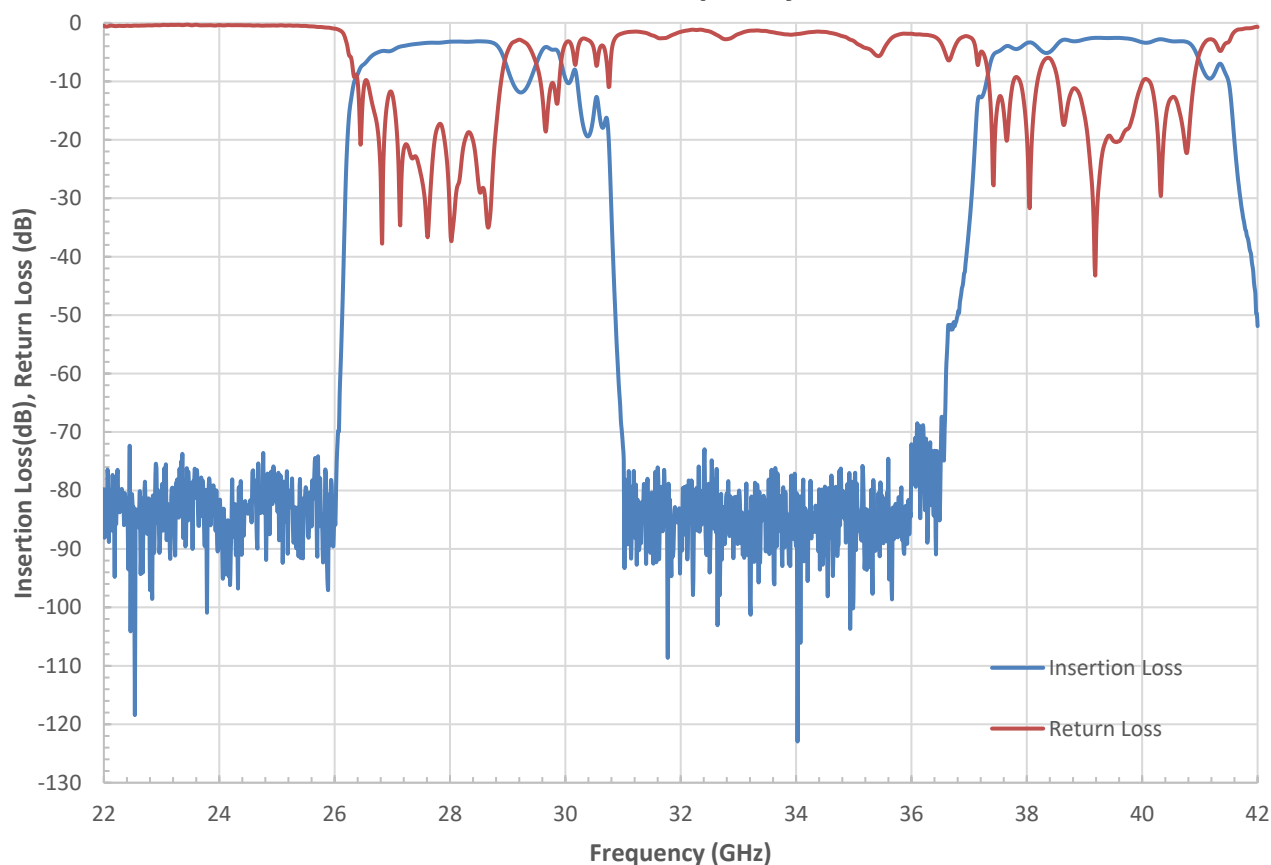
### Mechanical Specifications:

Item	Specification
Waveguide	WR-28 Waveguide with UG-599/U Flange
Size	6.50" (L) X 0.75" (W) X 0.75" (H)
Material	Brass
Finish	Gold Plated
Weight	12.6 Oz
Outline	WF-BA-6.5-D

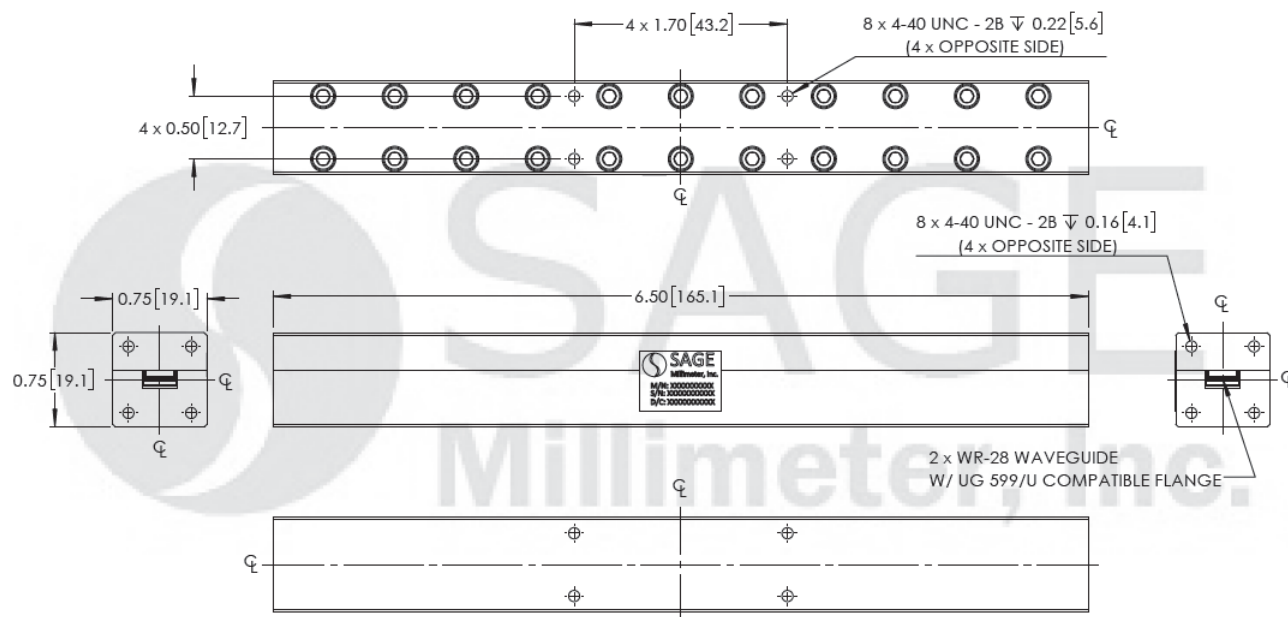


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Measured Insertion Loss, Return Loss Vs Frequency



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





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### 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.
- Eravant 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.

