



## WR-75 Waveguide, Lowpass Filter, 8.5 to 14.5 GHz

### Description:

**Model SWF-15316320-75-L1-AG** is a WR-75 waveguide lowpass filter with a passband frequency from 8.5 to 14.5 GHz and a rejection frequency 15.5 to 22.0 GHz. Due to the waveguide cut off nature, the low side of the filter has rejection range of DC to 7.5 GHz. The filter provides a nominal insertion loss of 1.0 dB across its passband and a typical rejection of 30 dB at 15.5 GHz. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers.



### Features:

- Ultra-Low Insertion Loss
- High Rejection

### Applications:

- High Power Transmitter
- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	8.5 GHz		14.5 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency, Low Side	DC		7.5 GHz
Rejection Frequency, High Side	15.5 GHz		22.0 GHz
Rejection	20 dB	30 dB	
Passband Return Loss		20 dB	
Power Handling			200 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

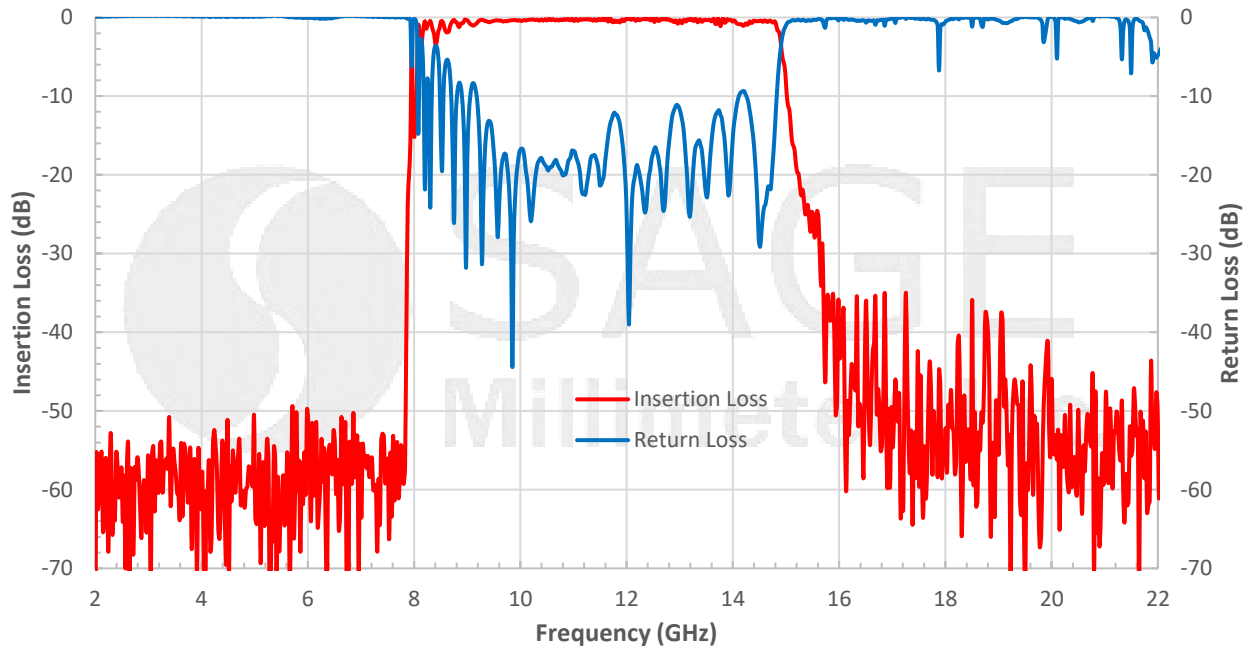
Item	Specification
Waveguide Port	WR-75 Waveguide with Standard Flange
Material	Aluminum
Finish	Silver Plated
Weight	8.2 Oz
Size	5.0" (L) X 1.5" (W) X 1.5" (H)
Outline	WF-L7-AG



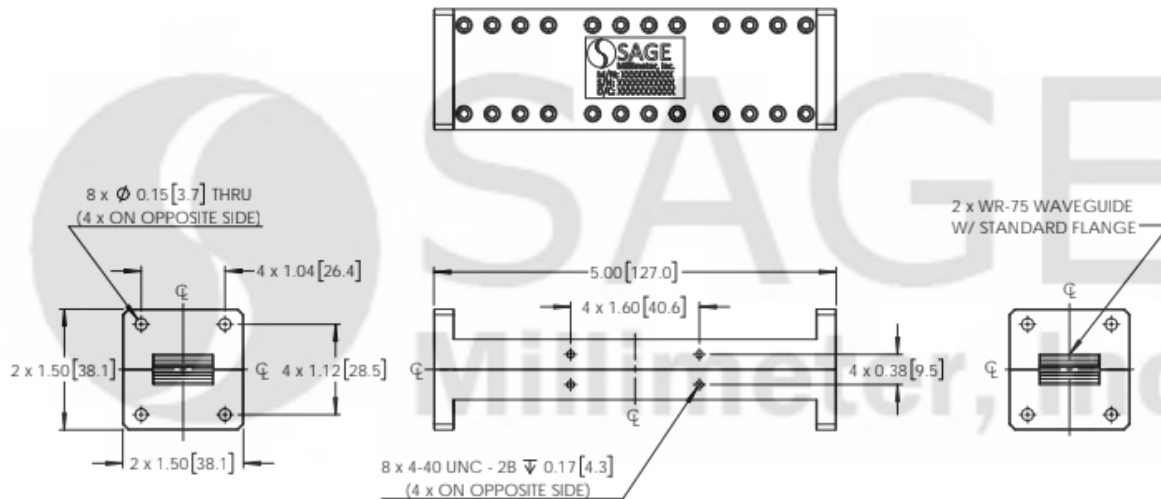


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### Typical Performance vs. Frequency



**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.
- Actual rejection value is higher than shown due to the dynamic range of the VNA being used.
- 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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