# SWF-96308350-10-B1

Rev. 1.0

## Waveguide Bandpass Filter, W Band, 92 to 100 GHz

### Description:


**Model SWF-96308350-10-B1** is a W band waveguide bandpass filter with a passband frequency of 92 to 100 GHz and rejection frequencies from DC to 88 GHz and 104 to 110 GHz. The nominal insertion loss of the bandpass filter is 2.5 dB and the typical rejection is 50 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available under different model numbers.

### Features:

- Low Cost
- Low Insertion Loss
- High Rejection

### Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

### Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---|---|---|---|
| Passband Frequency | 92 GHz | | 100 GHz |
| Passband Insertion Loss | | 2.5 dB | |
| Passband Ripple | | ±0.3 dB | |
| Rejection Frequency, Low Side | DC | | 88 GHz |
| Rejection Frequency, High Side | 104 GHz | | 110 GHz |
| Rejection | | 50 dB | |
| Passband Return Loss | | 14 dB | |
| Specification Temperature | | +25 ˚C | |
| Operating Temperature | -40 ˚C | | +85 ˚C |

### Mechanical Specifications:

| Item | Specification |
|---|---|
| RF Ports | WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange |
| Material | Aluminum |
| Finish | Gold Plated |
| Weight | 0.4 Oz |
| Size | 1.50” (L) X 0.75” (Ø) |
| Outline | WF-BW-A-1.5 |

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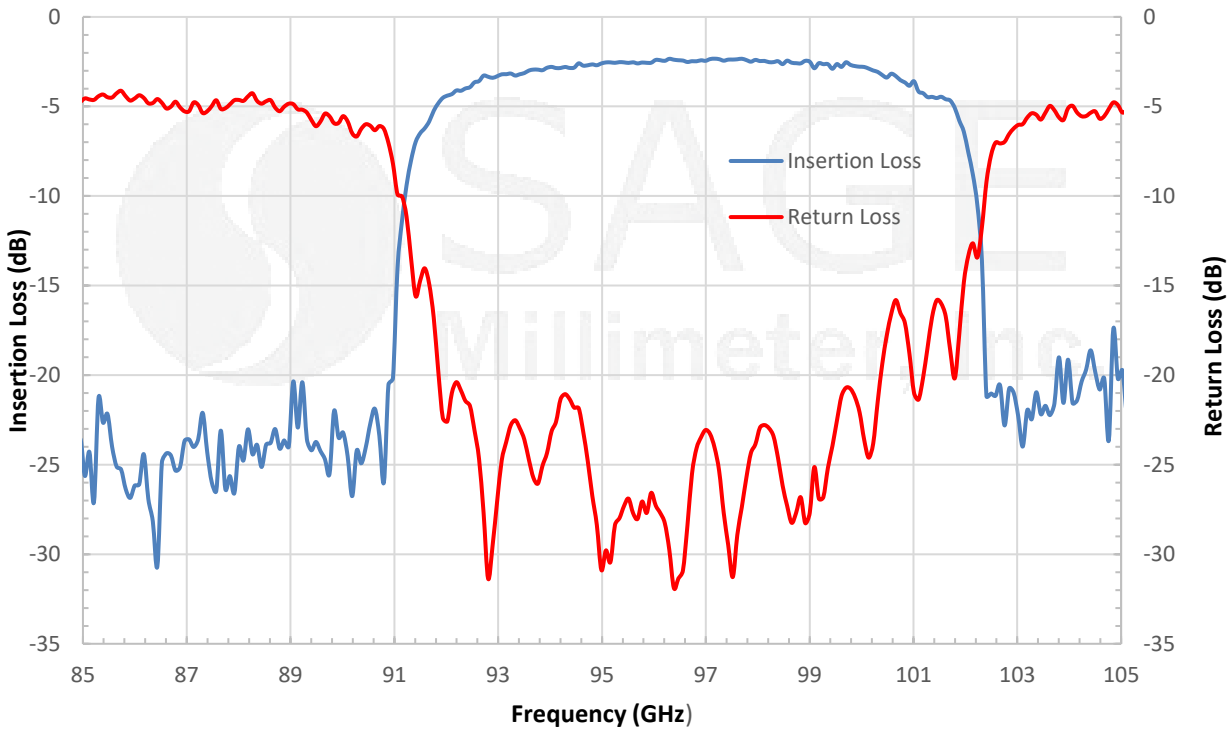
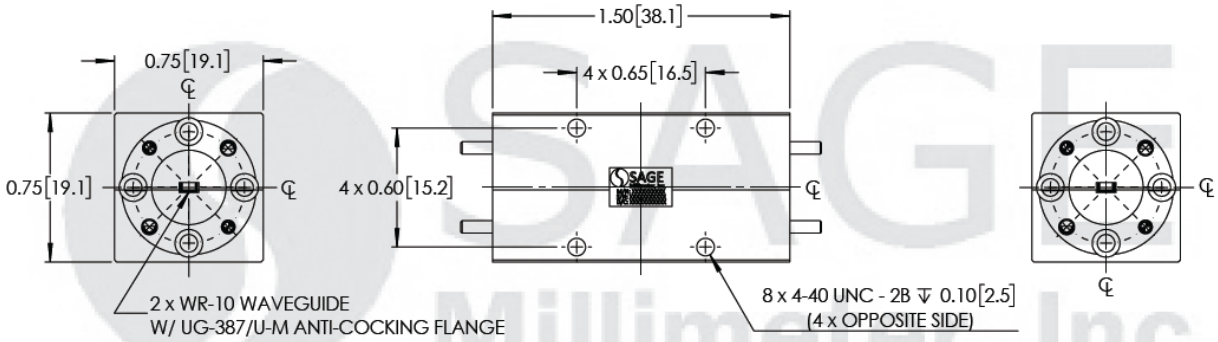
## Typical Performance vs. Frequency




## 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 degrade performance and/or damage the device.

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