

## SWF-69302340-12-B1

### Waveguide Bandpass Filter, E Band, 69 to 71 GHz

**SWF-69302340-12-B1** is an E-band waveguide bandpass filter with a passband frequency of 69 to 71 GHz and rejection frequencies from DC to 65 GHz and 73 to 95 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the typical rejection is 40 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.



#### Electrical Specifications:

| Parameter                      | Minimum | Typical | Maximum |
|--------------------------------|---------|---------|---------|
| Passband Frequency             | 69 GHz  |         | 71 GHz  |
| Passband Insertion Loss        |         | 1.5 dB  | 2.5 dB  |
| Passband Ripple                |         | ±0.3 dB |         |
| Rejection Frequency, Low Side  | DC      |         | 65 GHz  |
| Rejection Frequency, High Side | 73 GHz  |         | 95 GHz  |
| Rejection                      |         | 40 dB   |         |
| Passband Return Loss           |         | 14 dB   |         |
| Specification Temperature      |         | +25°C   |         |
| Operating Temperature          | -40°C   |         | +85°C   |

#### Mechanical Specifications:

| Item      | Specification                        |
|-----------|--------------------------------------|
| Waveguide | WR-12 Waveguide with UG-387/U Flange |
| Material  | Aluminum                             |
| Finish    | Gold Plated                          |
| Weight    | 0.4 Oz                               |
| Size      | 1.20" (L) X 0.75" (Ø)                |
| Outline   | WF-BE                                |

#### ECCN

EAR99

#### FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

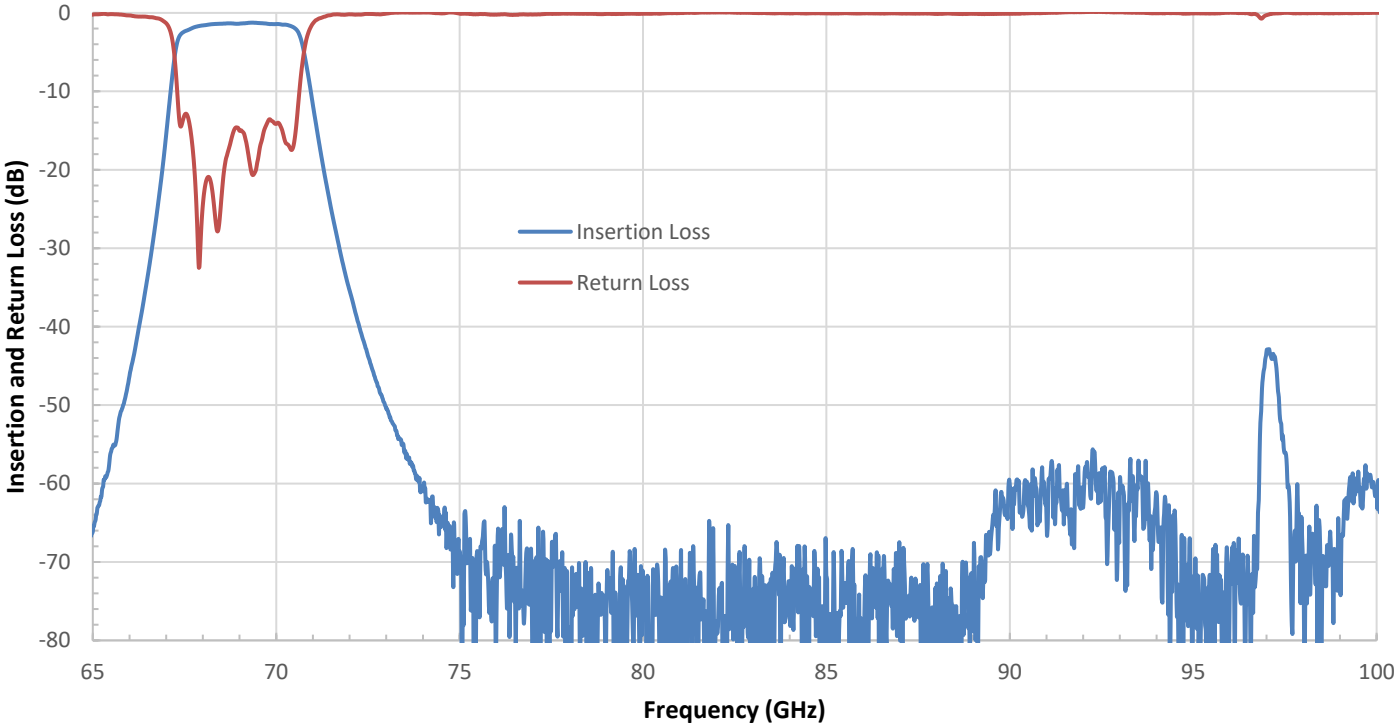
#### APPLICATIONS

- E-Band Communication Systems
- Radar Systems
- Sub-assemblies

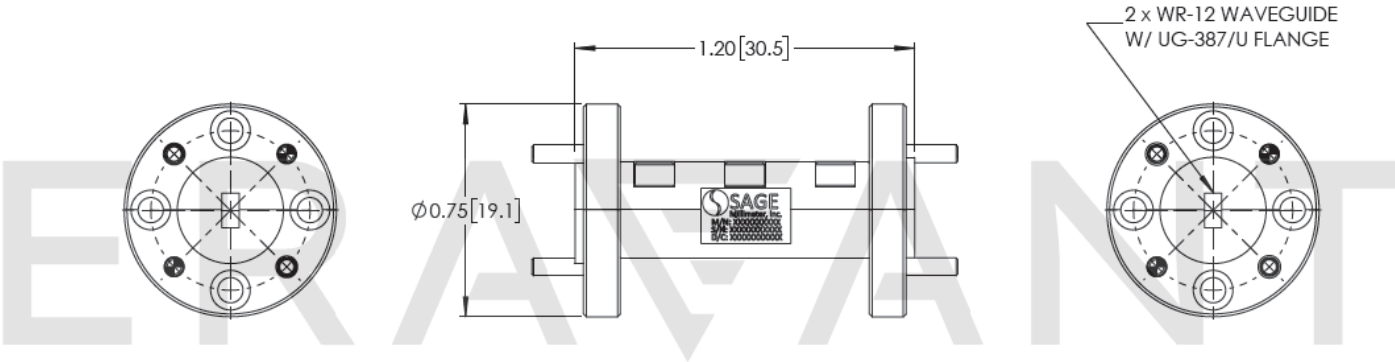
#### SUPPLEMENTAL DETAILS



Insertion and Return Loss vs. Frequency



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



**NOTE:**

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

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