

## SWF-40320340-22-B1

## Waveguide Bandpass Filter, Q Band, 30 to 50 GHz

**SWF-40320340-22-B1** is a Q band waveguide bandpass filter with a passband frequency of 30 to 50 GHz and rejection frequencies from DC to 25 GHz and 56 to 100 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             | 30 GHz  |          | 50 GHz  |
| Passband Insertion Loss        |         | 1.5 dB   |         |
| Passband Ripple                |         | ±0.25 dB |         |
| Rejection Frequency, Low Side  | DC      |          | 25 GHz  |
| Rejection Frequency, High Side | 56 GHz  |          | 100 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-22 Waveguide with UG-383/U Anti-Cocking Flange |
| Material  | Brass   |
| Finish    | Gold Plated                                       |
| Weight    | 6.2 Oz  |
| Size      | 1.80" (L) X 1.13" (W) X 1.13" (H)                 |
| Outline   | WF-LQ-A   |

## ECCN

EAR99

## FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

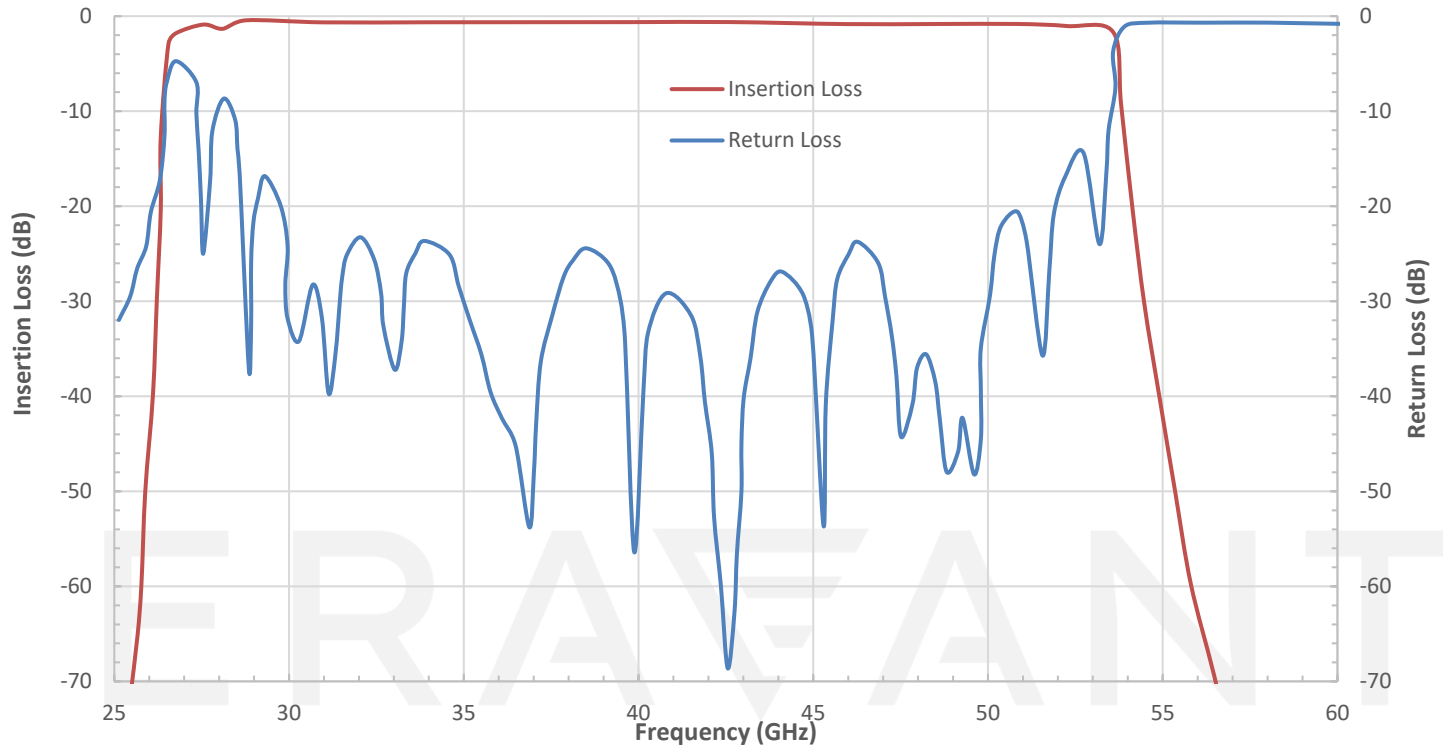
## APPLICATIONS

- Communication Systems
- Radar Systems
- Sub-assemblies

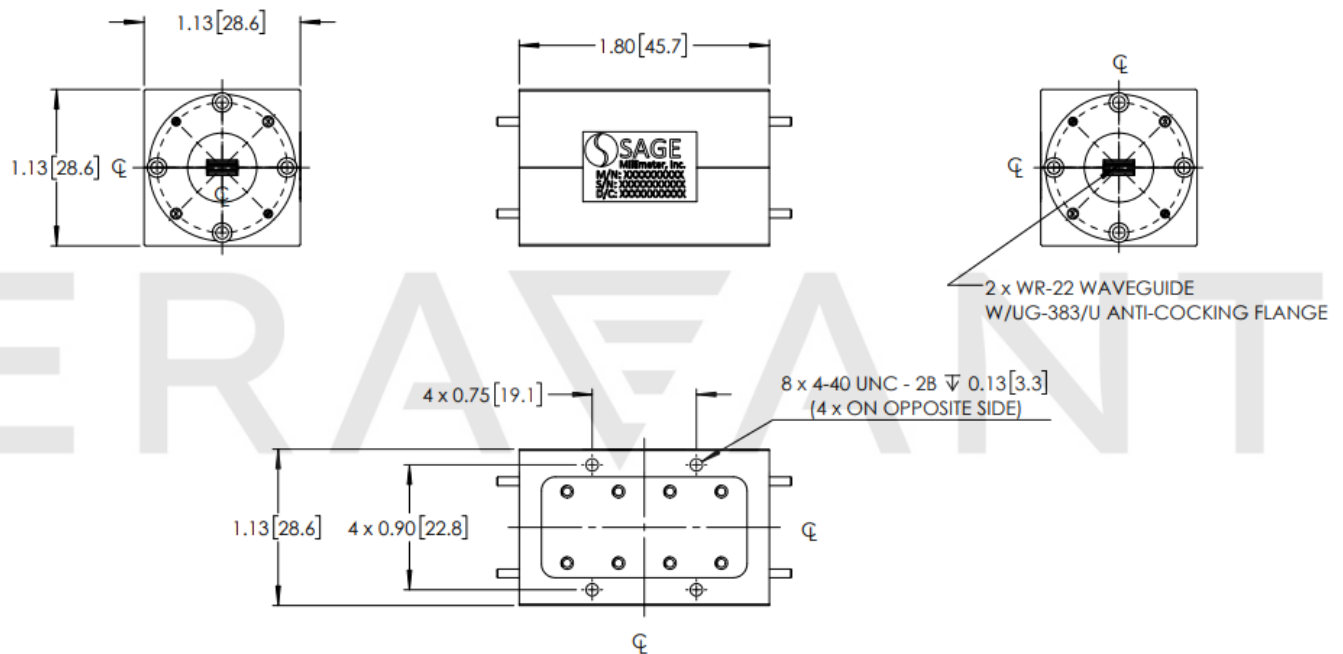
## SUPPLEMENTAL DETAILS



### Typical Performance vs. Frequency



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



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**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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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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