

Waveguide Bandpass Filter, Ka Band, 37.4 to 39.6 GHz

Description:

Model SWF-39302360-KFKF-B1 is a Ka band waveguide bandpass filter with two female K connectors, a passband frequency of 37.4 to 39.6 GHz, and rejection frequencies from DC to 36 GHz and 41 to 50 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the minimum



rejection is 60 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:

- **5G Systems**
- **Communication Systems**
- **Radar Systems**
- Sub-assemblies

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|--------------------------------|----------|---------|----------|
| Passband Frequency | 37.4 GHz | | 39.6 GHz |
| Passband Insertion Loss | | 2.0 dB | |
| Passband Ripple | | ±0.2 dB | |
| Rejection Frequency, Low Side | DC | | 36 GHz |
| Rejection Frequency, High Side | 41 GHz | | 50 GHz |
| Rejection | A | 60 dB | |
| Passband Return Loss | /\ | 14 dB | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

Mechanical Specifications:

| Mechanical Specifications: | | | |
|----------------------------|---|--|--|
| Item | Specification | | |
| Waveguide Ports | WR-28 Waveguide to Coax Adapters with K(F) Connectors | | |
| Material | Aluminum | | |
| Finish | Gold Plated | | |
| Weight | 2.4 Oz | | |
| Size | 2.50" (L) x 0.75" (W) x 0.75" (H) | | |
| Outline | WF-BA-CE | | |

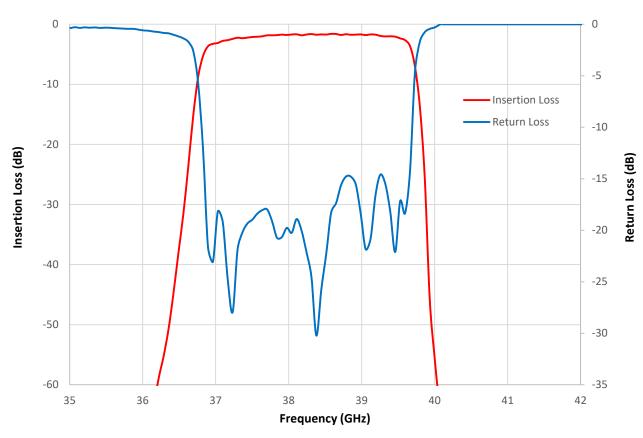


www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

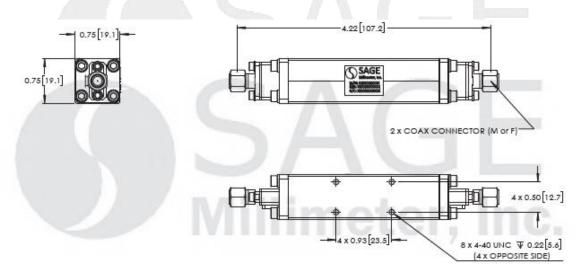
SAGE Millimeter, Inc.

Waveguide Bandpass Filter, Ka Band, 37.4 to 39.6 GHz

Typical Performance vs. Frequency



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





www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



Waveguide Bandpass Filter, Ka Band, 37.4 to 39.6 GHz

Note:

- All data are presented using a limited sample lot, actual data may vary unit to unit.
- All testing was performed under 25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

Proper torque, 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm), should be used. SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.





www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com