

Coaxial Bandpass Filter, 9.85 to 9.95 GHz

Description:

SCF-10301270-SFSF-B3 is a coaxial bandpass filter with a passband frequency of 9.85 to 9.95 GHz. The typical insertion loss of the bandpass filter is 2.5 dB and the passband ripple is ± 0.4 dB. The rejection frequencies are 9.65 GHz or less and 10.25 GHz or higher. The typical rejection is 70 dB and the typical passband return loss of the filter is 18 dB. The RF connectors of the the filter are SMA Female connectors. Other configurations are available under different model numbers.



Features:

- Low Insertion Loss
- High Rejection
- Steep Rejection Skirts
- Field Replaceable RF Connectors

Applications:

- Instrumentations
- Sub-assemblies
- System Integrations

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|--------------------------------|------------------|------------------|------------------|
| Passband Frequency | 9.85 GHz | | 9.95 GHz |
| Passband Insertion Loss | | 2.5 dB | |
| Passband Ripple | | ± 0.4 dB | |
| Rejection Frequency, Low Side | DC | | 9.65 GHz |
| Rejection, Low Side | | 70 dB | |
| Rejection Frequency, High Side | 10.25 GHz | | 22 GHz |
| Rejection, High Side | | 70 dB | |
| Passband Return Loss | | 18 dB | |
| Impedance | | 50 Ω | |
| Power Handling | | | 5 W (CW) |
| Specification Temperature | | +25 $^{\circ}$ C | |
| Operating Temperature | -40 $^{\circ}$ C | | +85 $^{\circ}$ C |

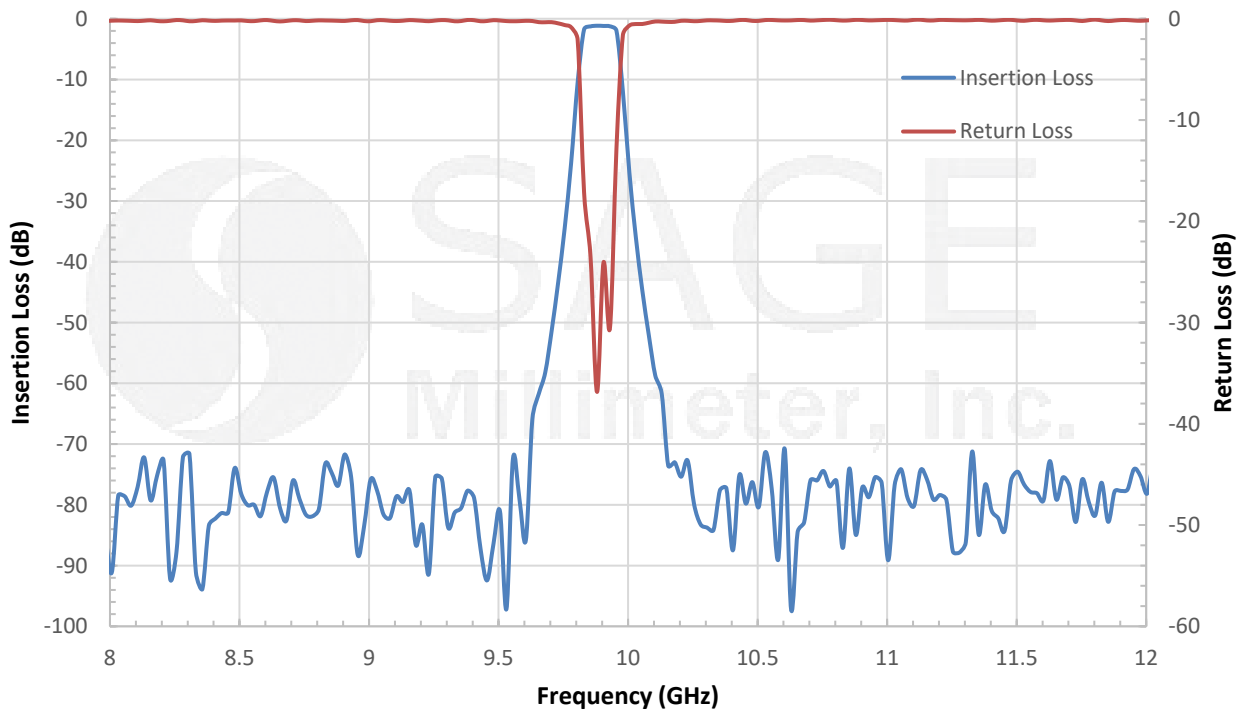
Mechanical Specifications:

| Item | Specifications |
|-----------|----------------|
| RF Port 1 | SMA Female |
| RF Port 2 | SMA Female |
| Material | Aluminum |
| Finish | Black Paint |
| Outline | CF-BX-LJ3 |

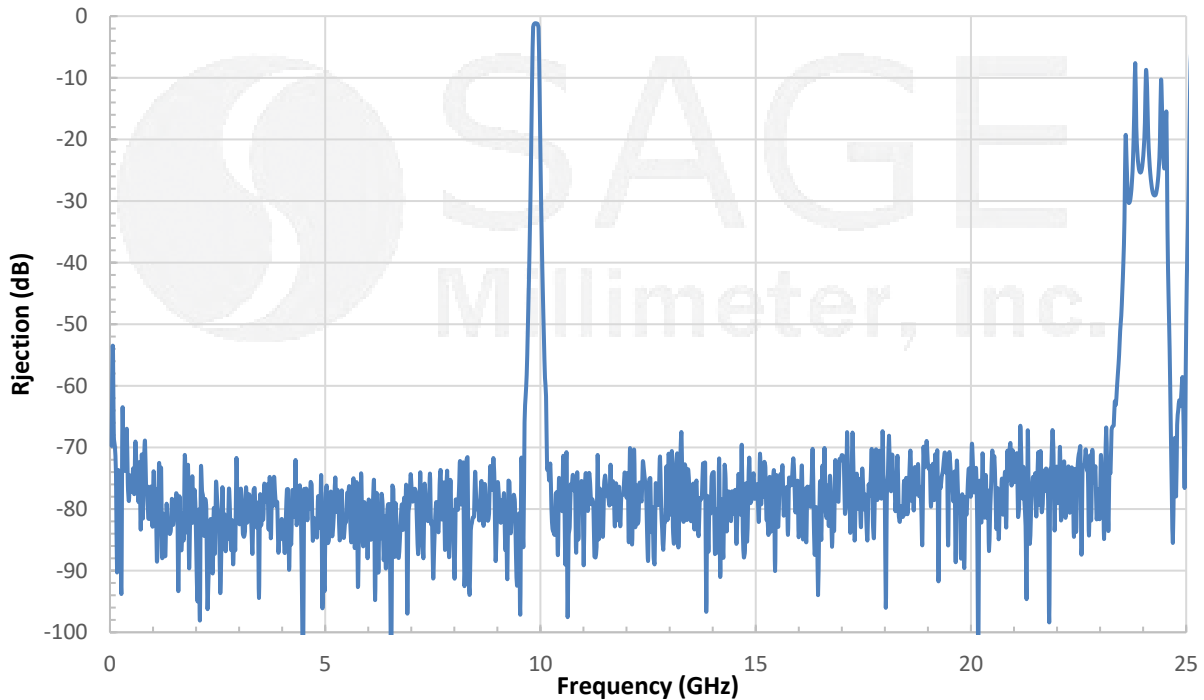


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Typical Performance vs. Frequency



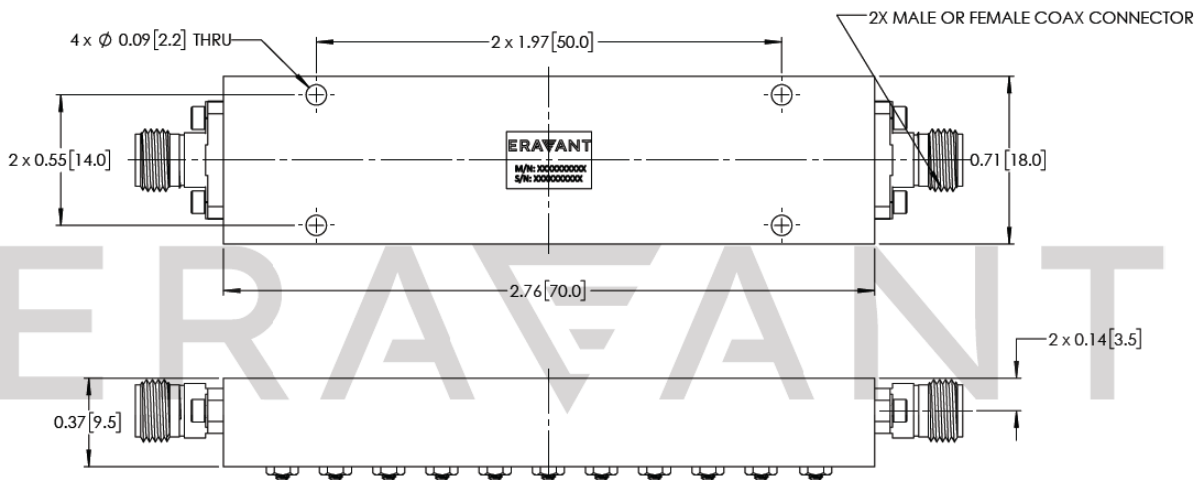
Typical Rejection vs. Frequency





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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.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

