



Coaxial Bandpass Filter, 9.9 to 10 GHz

Description:

SCF-10301270-SFSF-B3 is a coaxial bandpass filter with a passband frequency of 9.9 to 10 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. For instance, the SMA male and female configuration would be defined under model number **SCF-10301270-SFSM-B3**.



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	9.9 GHz		10 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		
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

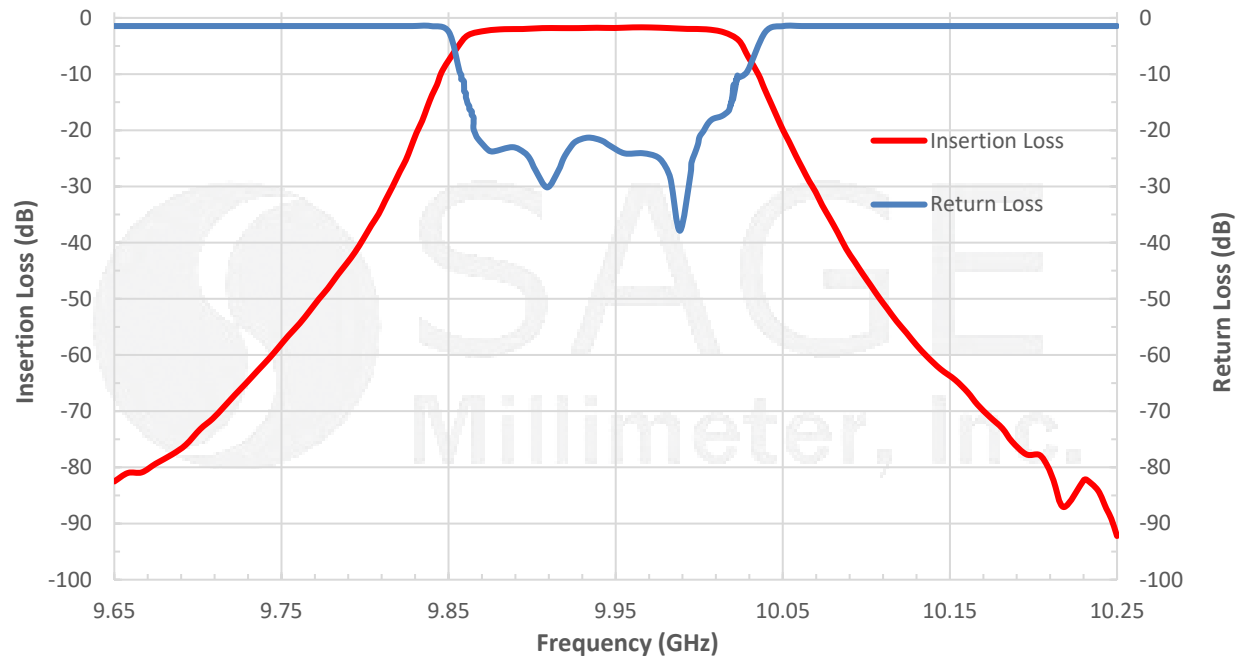
Mechanical Specifications:

Item	Specifications
RF Port 1	SMA Female
RF Port 2	SMA Female
Material	Aluminum
Finish	Black Paint
Outline	CF-BX-LJ1

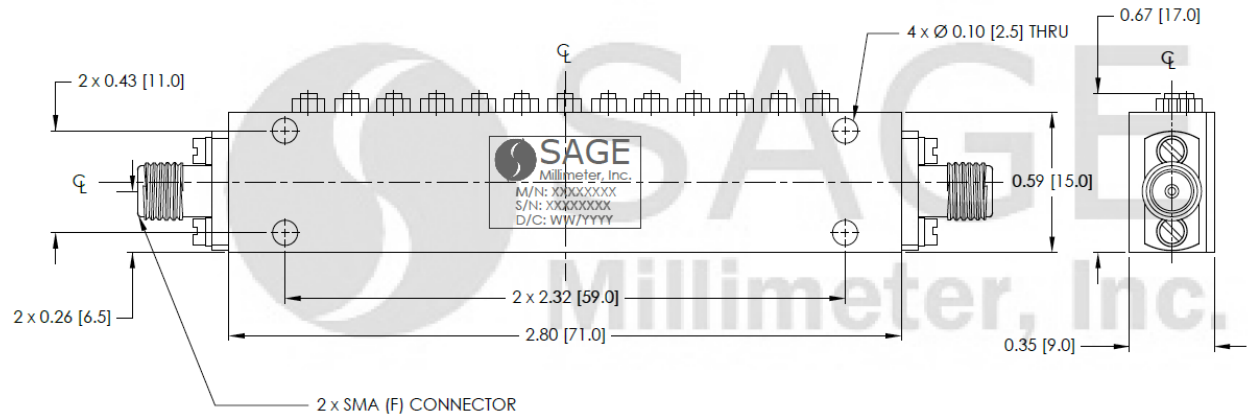


Coaxial Bandpass Filter, 9.9 to 10 GHz

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:

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