



## Coaxial Bandpass Filter, 17 to 18 GHz

### Description:

**SCF-18301370-SFSF-B3** is a coaxial bandpass filter with a passband frequency of 17 to 18 GHz. The typical insertion loss of the bandpass filter is 1 dB and the passband ripple is  $\pm 0.4$  dB. The rejection frequencies are 15.5 GHz or less and 19.5 GHz or higher. The typical rejection is 70 dB and the typical passband return loss of the filter is 16 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	17 GHz		18 GHz
Passband Insertion Loss		1 dB	
Passband Ripple		$\pm 0.4$ dB	
Rejection Frequency, Low Side	DC		15.5 GHz
Rejection, Low Side		70 dB	
Rejection Frequency, High Side	19.5 GHz		
Rejection, High Side		70 dB	
Passband Return Loss		16 dB	
Impedance		50 $\Omega$	
Power Handling			5 W (CW)
Specification Temperature		+25 $^{\circ}$ C	
Operating Temperature	-40 $^{\circ}$ C		+85 $^{\circ}$ C

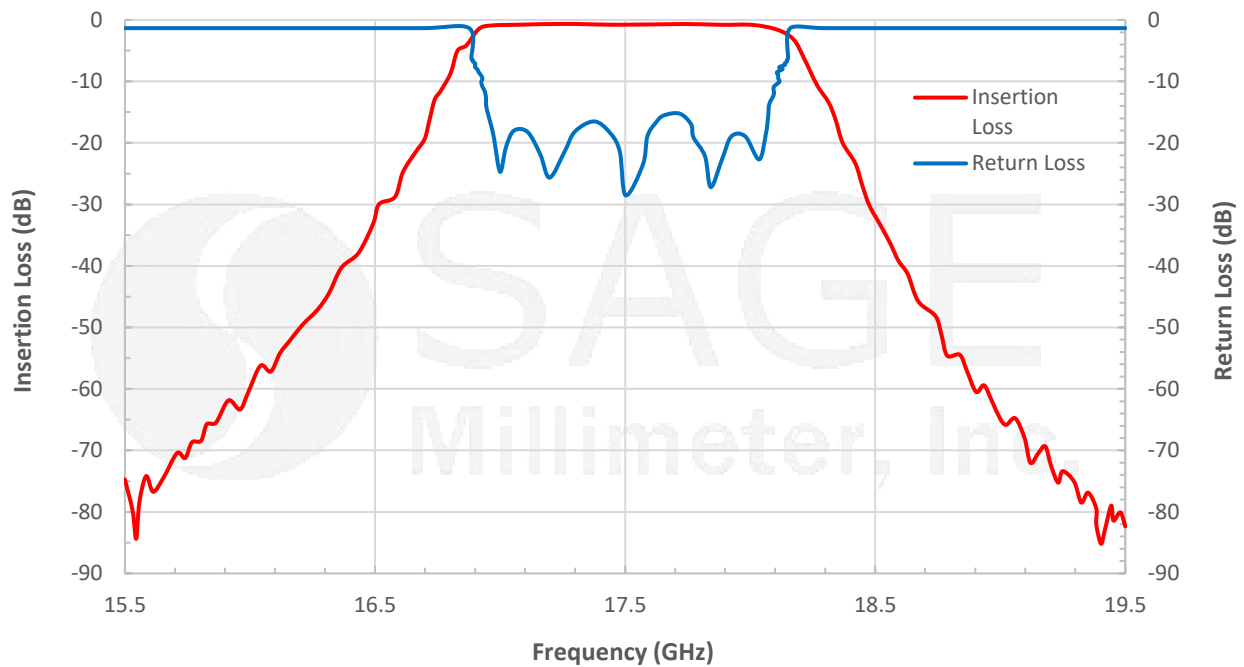
### Mechanical Specifications:

Item	Specifications
RF Port 1	SMA Female
RF Port 2	SMA Female
Material	Aluminum
Finish	Black Paint
Outline	CF-B5-LJ1

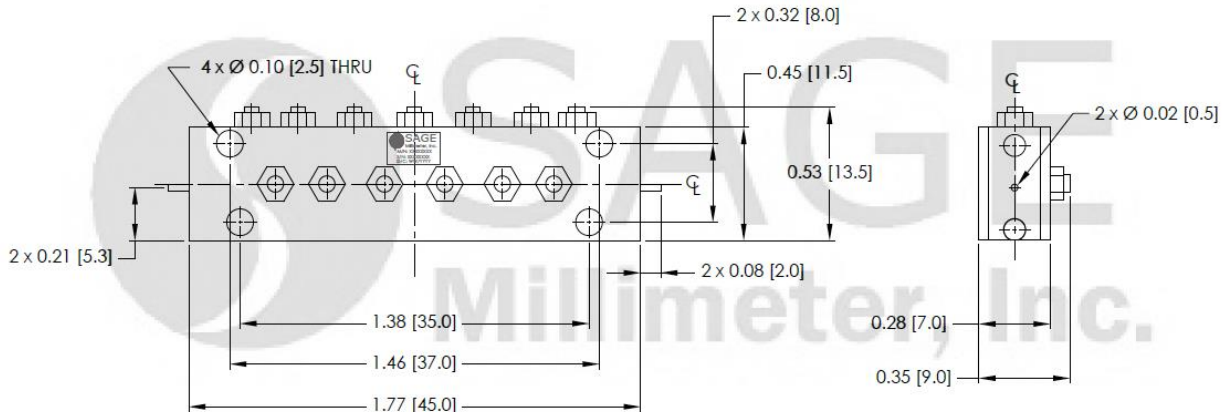


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### Typical Performance vs. Frequency



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