



## WR-12 Coaxial Highpass Filter, 51 to 90 GHz Passband, 40 dB Rejection

### Description:

Model **SCF-51346340-121F1F-H1** is a coaxial highpass filter with a passband frequency from 51 to 90 GHz. The filter rejects the frequencies from DC to 46 GHz and provides a nominal insertion loss of 1.0 dB in its passband with low ripple. Typical rejection for this model is 40 dB. The RF ports offer female 1 mm connectors. However, the models with other connector type, such as male connector, are also available under different model numbers.



### Features:

- Low Cost
- Low Insertion Loss
- High Rejection
- DC Short Circuit

### Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	51 GHz		90 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency	DC		46 GHz
Rejection		40 dB	
Passband Return Loss		10 dB	
Impedance		50 Ω	
Power Handling			10 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

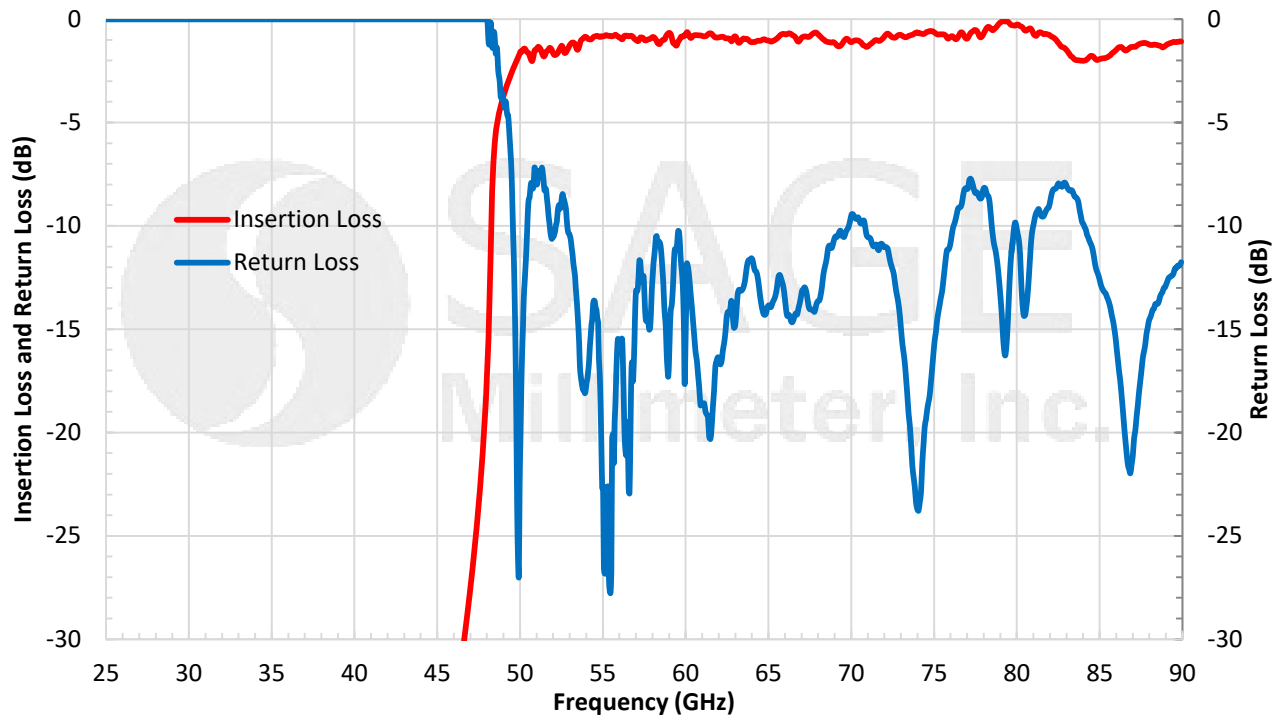
Item	Specifications
RF Ports	1.0 mm (F)
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.29" (L) x 0.75" (Ø)
Outline	CF-HE-B



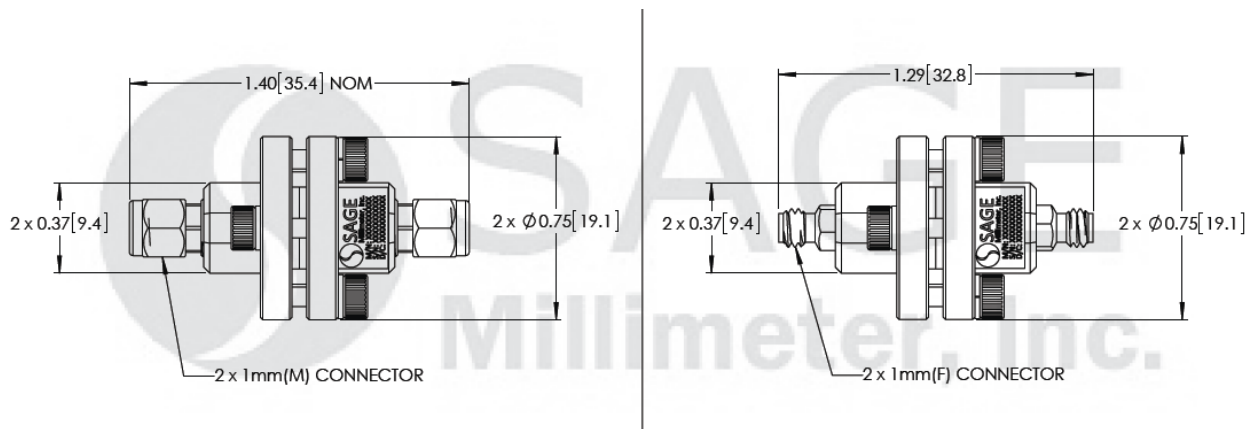


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### Typical Insertion and Return Loss vs. Frequency



### 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.
- 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.**

