

## 3.5 mm Coaxial Fixed Attenuator, 3 dB Attenuation

### Description:

**Model SCA-03-3M3F-S2** is a 3 dB coaxial attenuator that is used in millimeterwave systems and operates from DC to 26.5 GHz. The attenuator has a typical attenuation value of 3 dB across the frequency range. While the attenuator is designed and fabricated for full 3.5 mm coaxial band applications, the attenuation value of this model will have a wide range due to its broadband coverage. Various attenuation values are available under different model numbers.



### Features:

- Broadband Coverage
- Low Cost

### Applications:

- Test Lab
- Instrumentations
- System Integration

### Electrical Specifications:

| Parameter                 | Minimum | Typical | Maximum  |
|---------------------------|---------|---------|----------|
| Frequency                 | DC      |         | 26.5 GHz |
| Attenuation               |         | 3 dB    |          |
| Attenuation Accuracy      |         | ±1.4 dB |          |
| Return Loss               |         | 15 dB   |          |
| Power Handling            |         |         | 1 W (CW) |
| Impedance                 |         | 50 Ω    |          |
| Specification Temperature |         | +25 °C  |          |
| Operating Temperature     | -40 °C  |         | +85 °C   |

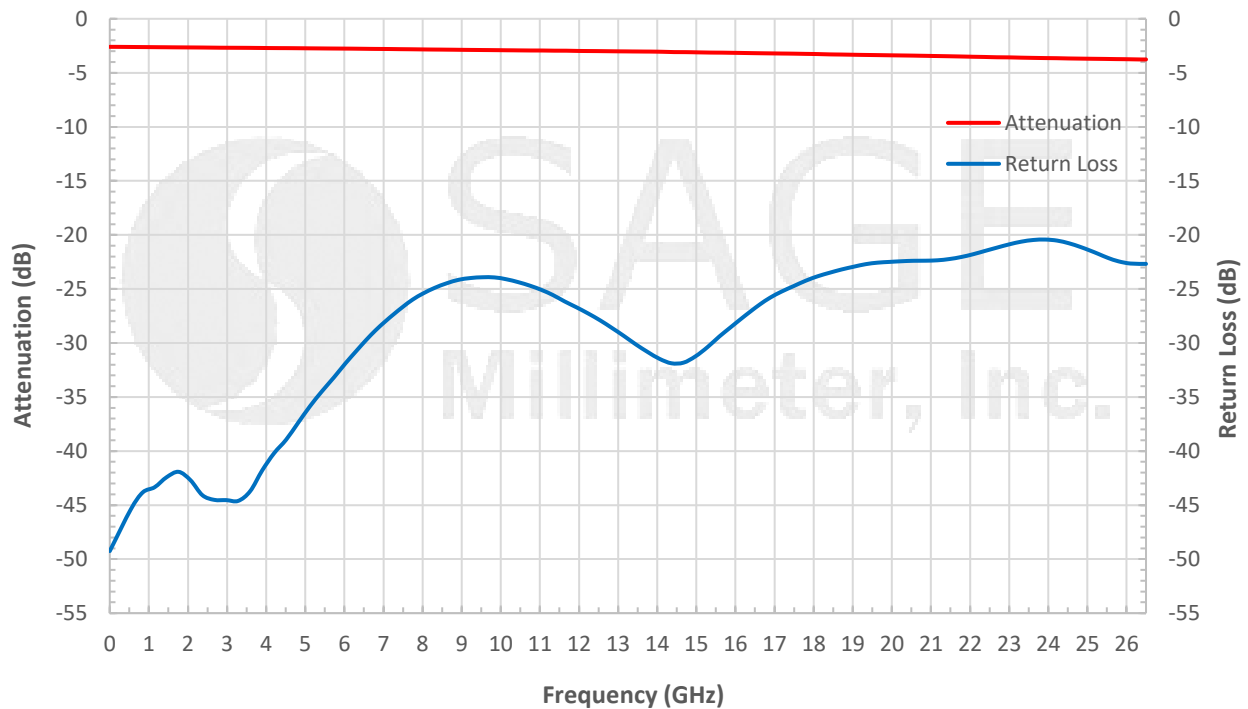
### Mechanical Specifications:

| Item                   | Specification           |
|------------------------|-------------------------|
| Connector 1            | 3.5 mm Male             |
| Connector 2            | 3.5 mm Female           |
| Body Material          | Stainless Steel         |
| Body Finish            | Passivated              |
| Connector Pin Material | Beryllium Copper        |
| Connector Pin Finish   | Gold Plated over Nickel |
| Weight                 | 0.3 Oz                  |
| Length                 | 1.34"                   |
| Outline                | CA-3-CE1                |

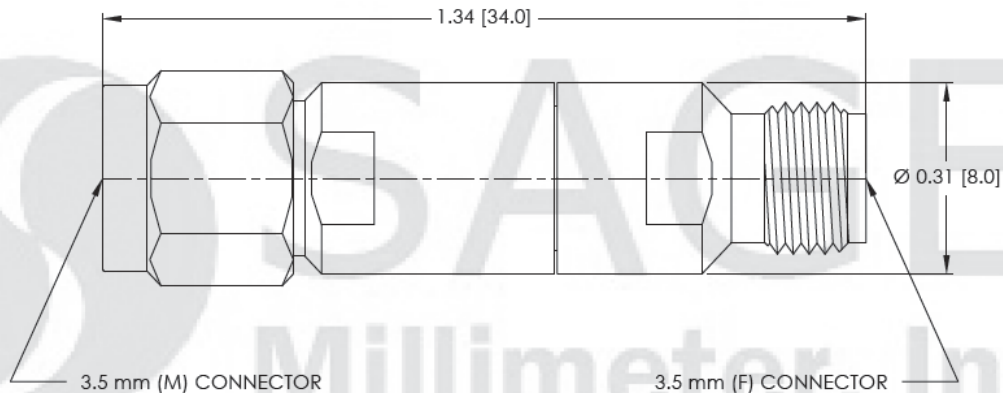


## 3.5 mm Coaxial Fixed Attenuator, 3 dB Attenuation

### 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:

- Exceeding absolute maximum ratings shown will damage the device.
- 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.**



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