

3.5 mm Coaxial Fixed Attenuator, 1 dB Attenuation, Thermal Vacuum Safe

SCA-01-3M3F-SD-V is a thermal vacuum safe, 1 dB coaxial attenuator that is used in millimeterwave systems and operates from DC to 33 GHz. The attenuator has a typical attenuation value of 1 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.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|----------|
| Frequency Range | DC | | 33 GHz |
| Attenuation | | 1 dB | |
| Attenuation Accuracy | | ±0.8 dB | |
| Return Loss | | 20 dB | |
| Power Handling* | | | 2 W (CW) |
| Impedance | | 50 Ω | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -55 °C | | +125 °C |

*2 W average to 25 °C ambient temperature, derated linearly to 0.5 W @ 125 °C
*20 W @ 5µs pulse width with maximum 0.5% duty cycle

Mechanical Specifications:

| Item | Specification |
|------------------------|------------------|
| Connector 1 Type | 3.5 mm Male |
| Connector 2 Type | 3.5 mm Female |
| Body Material | Stainless Steel |
| Body Finish | Passivated |
| Connector Pin Material | Beryllium Copper |
| Connector Pin Finish | Gold Plated |
| Insulator Material | PEI |
| Weight | 0.3 Oz |
| Length | 0.83" |
| Outline | CA-3-V-9 |

ECCN
EAR99

FEATURES

- Thermal Vacuum Safe
- Broadband Coverage
- Low Cost

APPLICATIONS

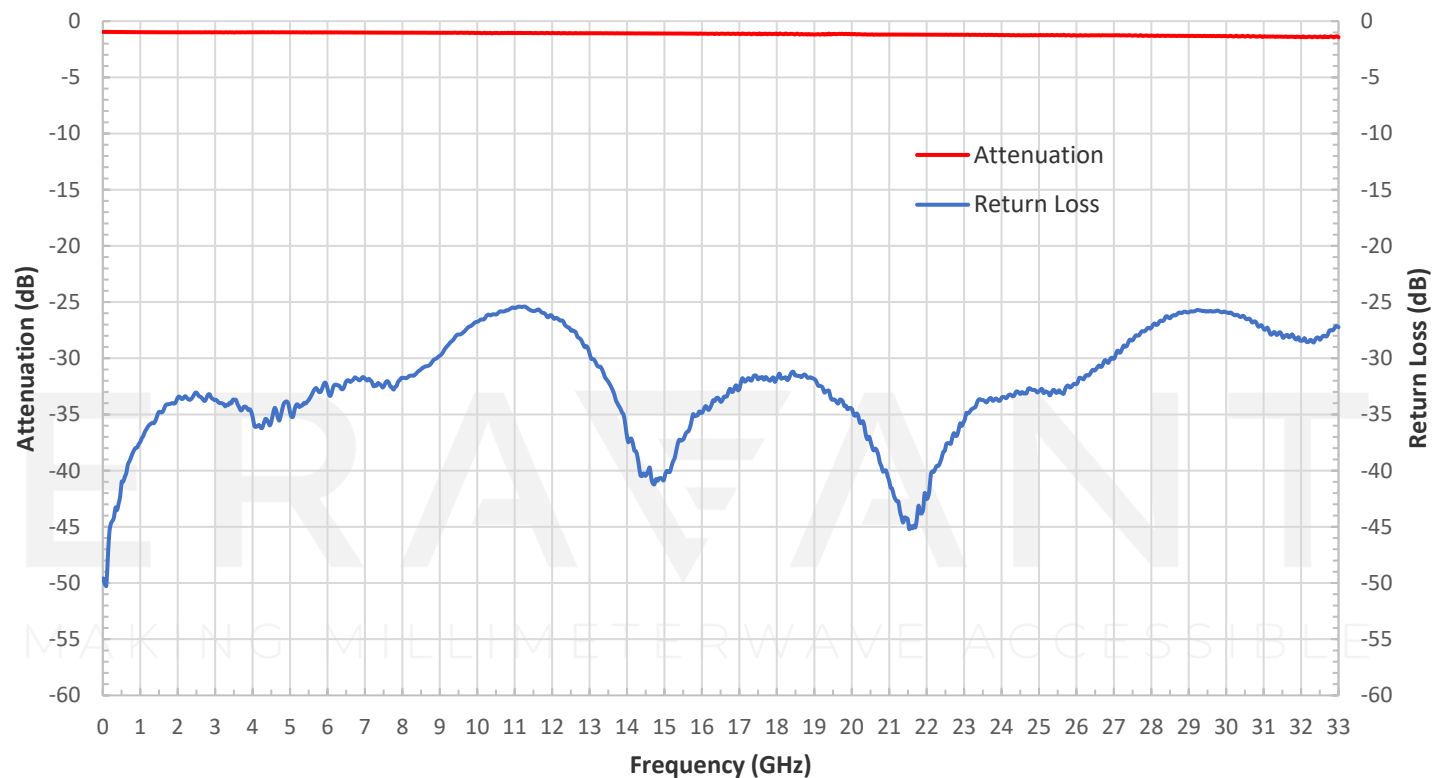
- Thermal Vacuum Chamber / Vacuum Environment Testing
- Test Lab
- Instrumentations
- System Integration

SUPPLEMENTAL DETAILS

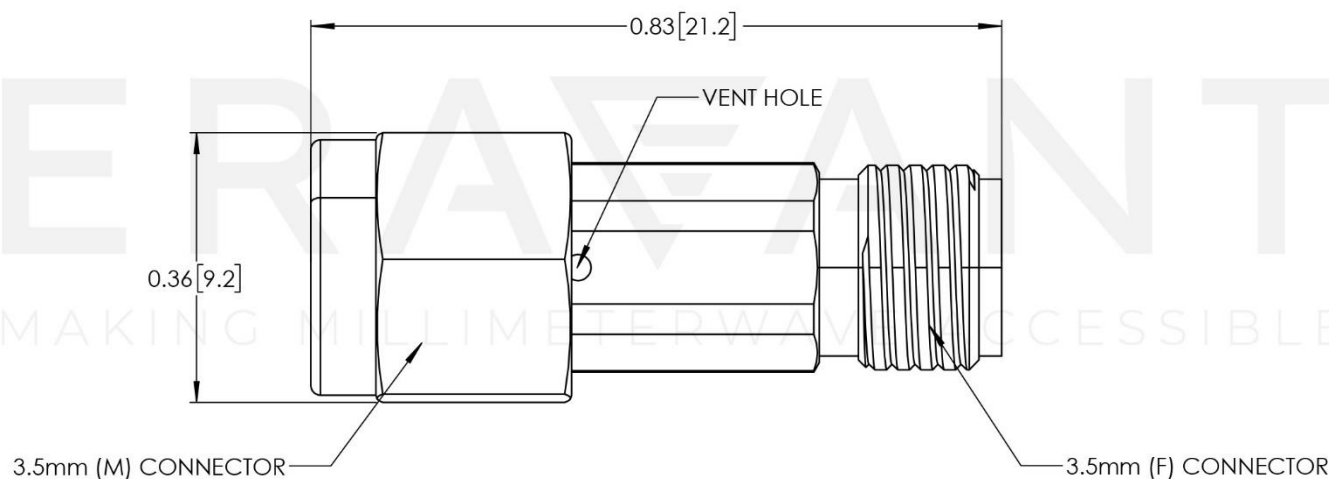


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Typical Performance vs. Frequency



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 slightly from unit to unit.
- All testing is performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- Proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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