

D-Band Fixed Attenuator, High Precision, 6 dB

STA-06-06-F1 is a 6 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 6 dB at center frequency, 140 GHz. The attenuator's waveguides are manufactured with precision wire EDM to ensure high accuracy and a quality internal surface finish. The design features anticocking flanges to reduce misalignment errors and a sandblasted surface treatment to provide a durable finish. While the attenuator is designed for full waveguide band applications, the attenuation value does show a minor slope within the band due to its distinct mechanical configuration. Other attenuation values are available under different model numbers as **STA-XX-06-F1**, where **XX** is the desired attenuation value.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency Range | 110 GHz | | 170 GHz |
| Attenuation @ 140 GHz | | 6 dB | |
| Return Loss | | 20 dB | |
| Power Handling | | | 300 mW |
| Specification Temperature | | +25°C | |
| Operating Temperature | -40°C | | +85°C |

Mechanical Specifications:

| Item | Specification | |
|---------------------|---|--|
| Waveguide Ports | WR-06 Waveguide with UG-387/U-M Anti-Cocking Flange | |
| Attenuation Setting | Fixed | |
| Insertion Length | 2.00" | |
| Material | Brass | |
| Finish | Gold Plated | |
| Weight | 1.5 Oz | |
| Outline | TA-FD-A | |
| | | |

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FEATURES

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

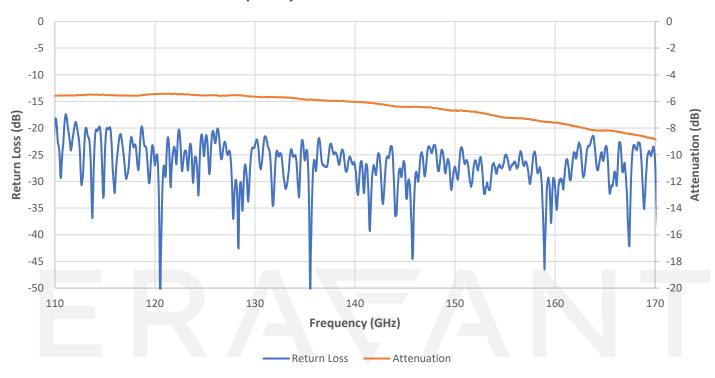
APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

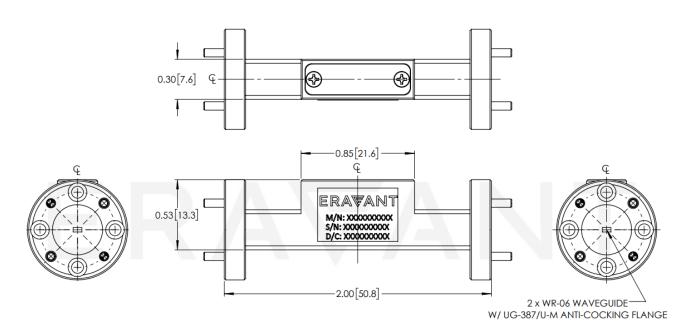
SUPPLEMENTAL DETAILS



Measured 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.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.

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