



Q-Band Fixed Attenuator, 6 dB Attenuation

Description:

Model STA-06-22-F1 is a 6 dB fixed attenuator that is used in millimeterwave systems and operates from 33 to 50 GHz. The attenuator has a fixed attenuation value of 6 dB at center frequency, 41.5 GHz. The attenuator's waveguides are manufactured with precision wire EDM to ensure high accuracy and a quality internal surface finish. The design features anti-cocking 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-22-F1**, where **XX** is the desired attenuation value.



Features:

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

Applications:

- Test Lab
- Instrumentations
- System Integration

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency Range | 33 GHz | | 50 GHz |
| Attenuation @ 41.5 GHz | | 6 dB | |
| Return Loss | | 20 dB | |
| Power Handling | | 500 mW | 750 mW |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

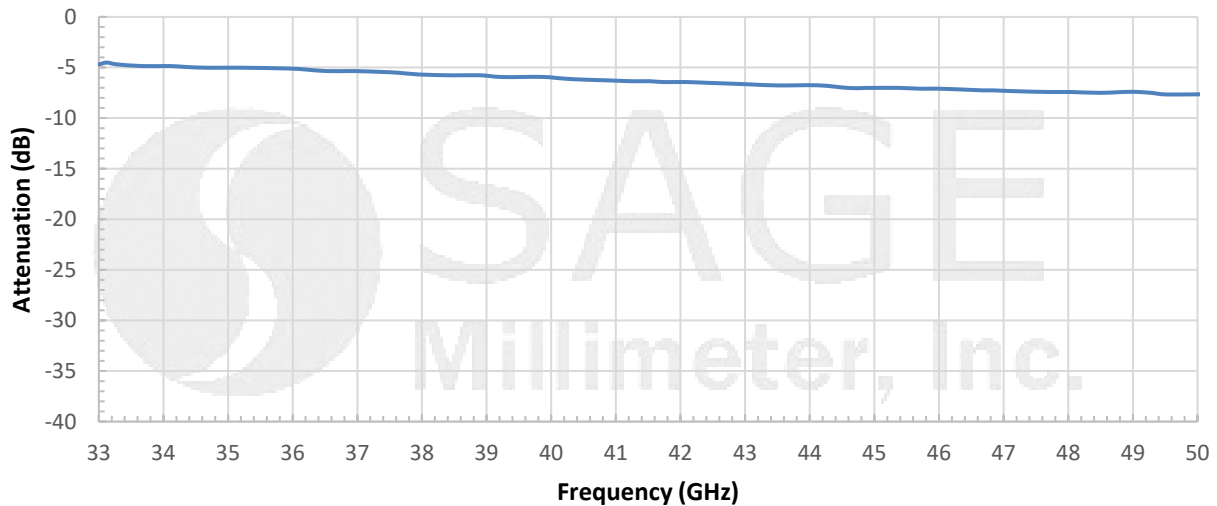
Mechanical Specifications:

| Item | Specification |
|---------------------|---|
| Waveguide Ports | WR-22 Waveguide with UG-383/U Anti-Cocking Flange |
| Attenuation Setting | Fixed |
| Insertion Length | 3.00" |
| Material | Brass |
| Finish | Gold Plated |
| Weight | 4.5 Oz |
| Outline | TA-FQ-A |

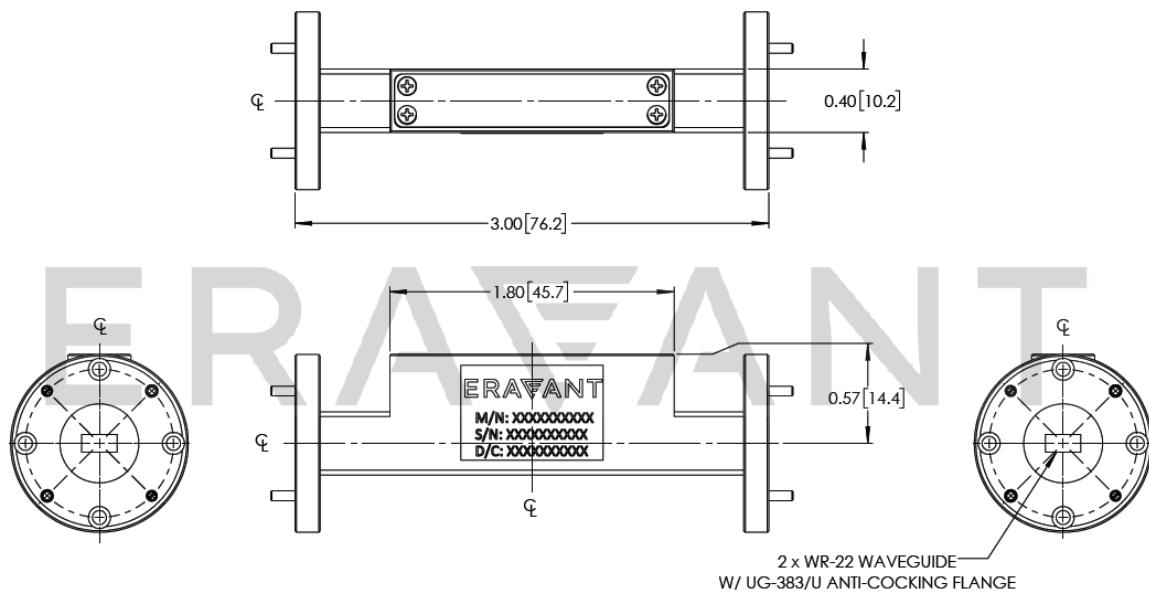


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Typical Measured Attenuation vs Frequency



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 will damage the device.
- Any foreign objects in the waveguide will cause performance issues and may damage the device.



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