

## F-Band Fixed Attenuator, 10 dB

### Description:

**Model STA-10-08-F2** is a 10 dB fixed attenuator that is used in millimeterwave systems and operates from 90 to 140 GHz. The attenuator has a fixed attenuation value of 10 dB at the center frequency, 115 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### 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                 | 90 GHz  |         | 140 GHz    |
| Attenuation @ 115 GHz     |         | 10 dB   |            |
| Return Loss               |         | 16 dB   |            |
| Power Handling            |         |         | 0.5 W (CW) |
| Specification Temperature |         | +25 °C  |            |
| Operating Temperature     | -40 °C  |         | +85 °C     |

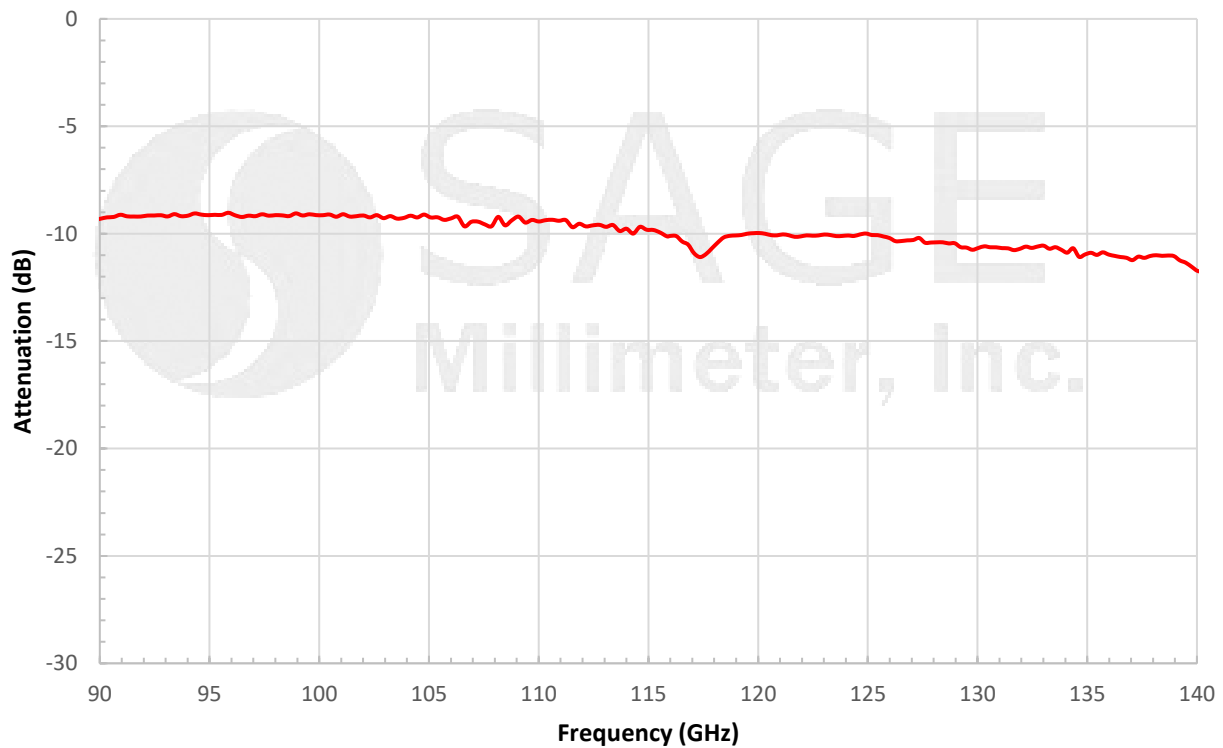
### Mechanical Specifications:

| Item               | Specification                                   |
|--------------------|-------------------------------------------------|
| RF Ports           | WR-08 Waveguide with UG-387/U-M Flange          |
| Setting            | Fixed                                           |
| Flange Material    | Brass                                           |
| Waveguide Material | Copper                                          |
| Finish             | Gold Plated Waveguide Faces; Black Painted Body |
| Insertion Length   | 2.0"                                            |
| Outline            | TA-FF-BX1                                       |

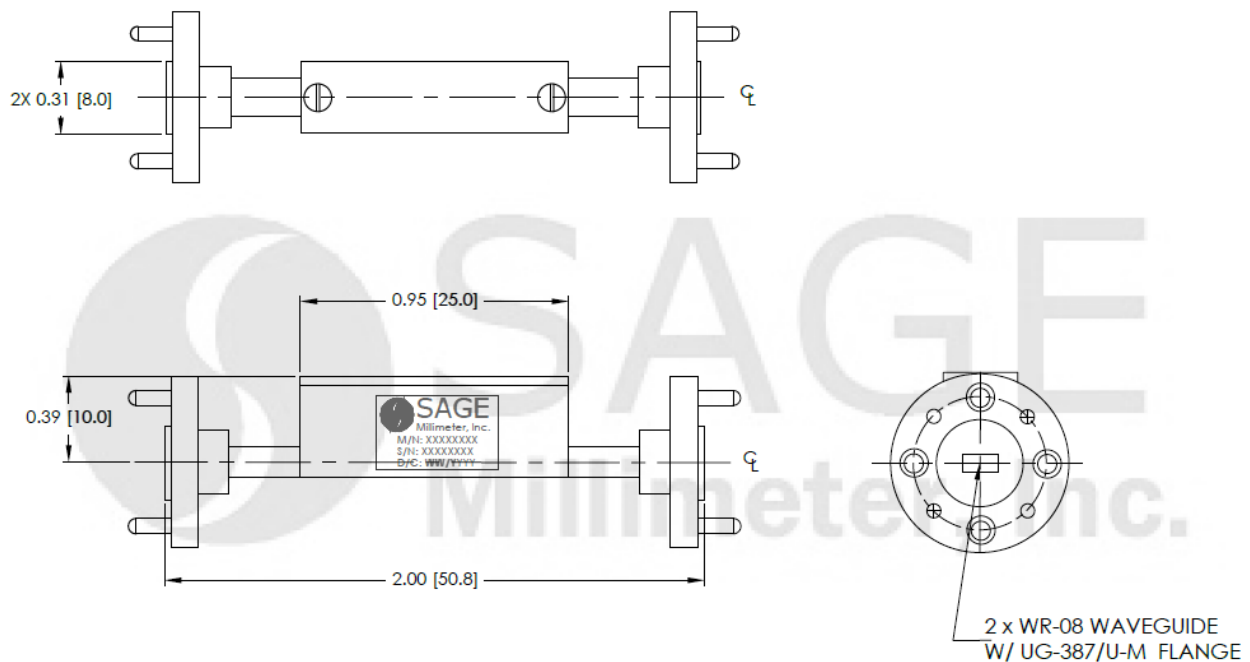


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### Typical Performance vs Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])





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### 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.
- Other mechanical configurations are available under different model numbers.

### Caution:

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

