

## Waveguide Tunable Load, F Band

### Description:

**Model SWL-0820-T1** is an F band tunable waveguide load that covers the frequency range of 90 to 140 GHz. The tunable load is constructed with a linear bearing and high precision Mitutoyo micrometer to guarantee smooth, long term repeatable mechanical movements. The tunable load offers 30 dB minimum return loss and up to +20 dBm RF power.



### Features:

- High Return Loss
- Linear Bearing Configuration
- Mitutoyo Micrometer Driven

### Applications:

- Test Labs
- Test Instrumentation
- System Calibration and Tuning

### Electrical Specifications:

| Parameter                 | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency                 | 90 GHz  |         | 140 GHz |
| VSWR                      |         | 1.10:1  |         |
| Power Handling            |         | 0.1 W   |         |
| Specification Temperature |         | +25°C   |         |
| Operating Temperature     | -40°C   |         | +85°C   |

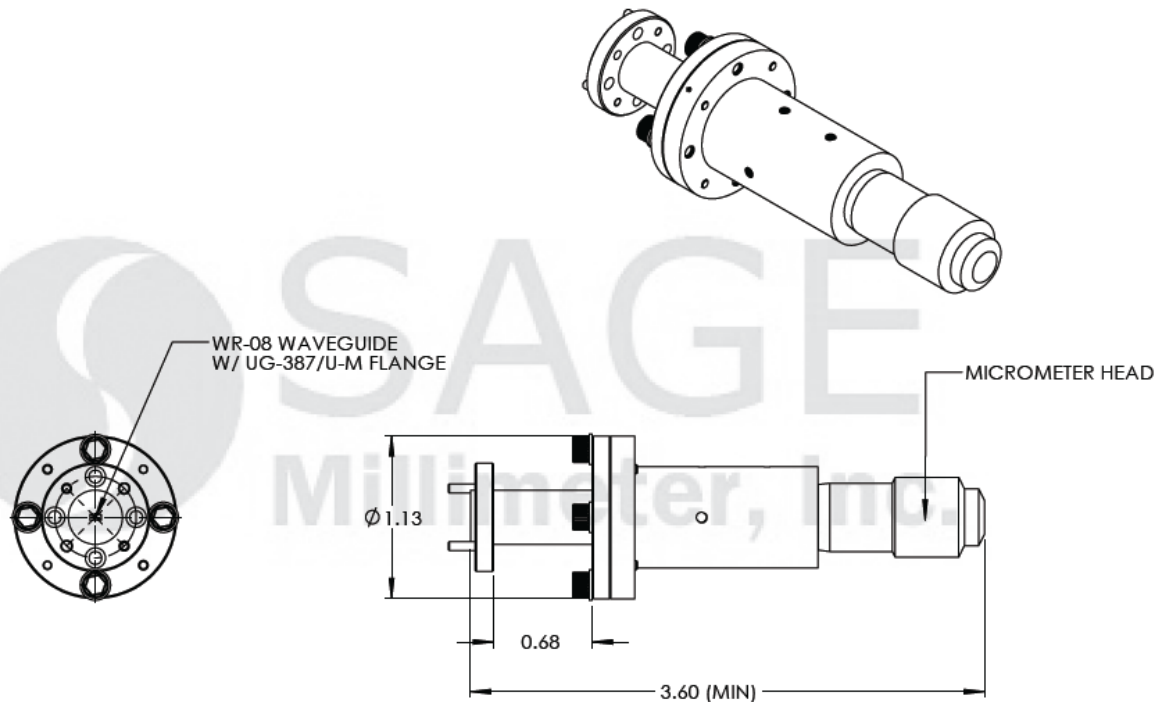
### Mechanical Specifications:

| Port                      | Specifications                               |
|---------------------------|----------------------------------------------|
| Waveguide                 | WR-08 Waveguide with UG 387/U-M Flange       |
| Waveguide Material        | Copper                                       |
| Waveguide Flange Material | Brass                                        |
| Finish                    | Gold Plated Waveguide; Black Anodized Handle |
| Weight                    | 3.5 Oz                                       |
| Outline                   | WL-FT                                        |



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



**Note:**

- All data are presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under 25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- Any foreign objects in the waveguide will degrade performance and/or damage the device.