

## STP-18-08-M1-C-1.2

### WR-08 Compact Micrometer Driven Phase Shifter

**STP-18-08-M1-C-1.2** is a WR-08 compact micrometer driven phase shifter that covers the frequency range from 90 to 140 GHz. The phase shifter features a high-resolution precision micrometer which allows for finer adjustment sensitivity than a standard micrometer. The phase shifter is an ideal piece of equipment in waveguide systems where broadband phase shifting is required. The phase shifter exhibits a 0.6 dB typical insertion loss and an adjustable phase range of up to 180 degrees.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	90 GHz		140 GHz
Insertion Loss		0.6 dB	
Phase Shifting Range	0°		180°
Return Loss		20 dB	
Power Handling			100 mW (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 Anti-Cocking Flange
Setting Type	Micrometer Head
Insertion Length	1.20"
Material	Aluminum
Finish	Gold Plated
Weight	3.5 Oz
Outline	TA-MF-A-1.2

#### ECCN

EAR99

#### FEATURES

- Full Band Coverage
- Compact Size
- High Resolution Micrometer
- Low Insertion Loss

#### APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

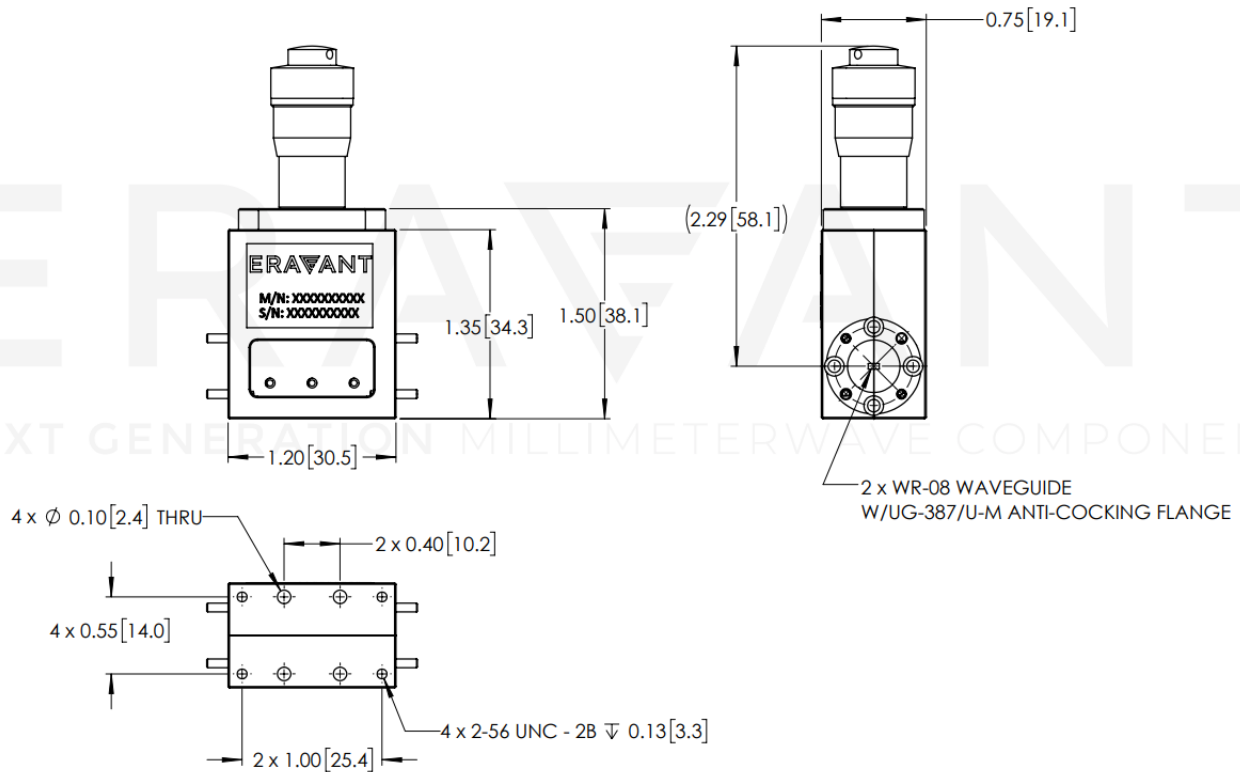
#### SUPPLEMENTAL DETAILS



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### Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



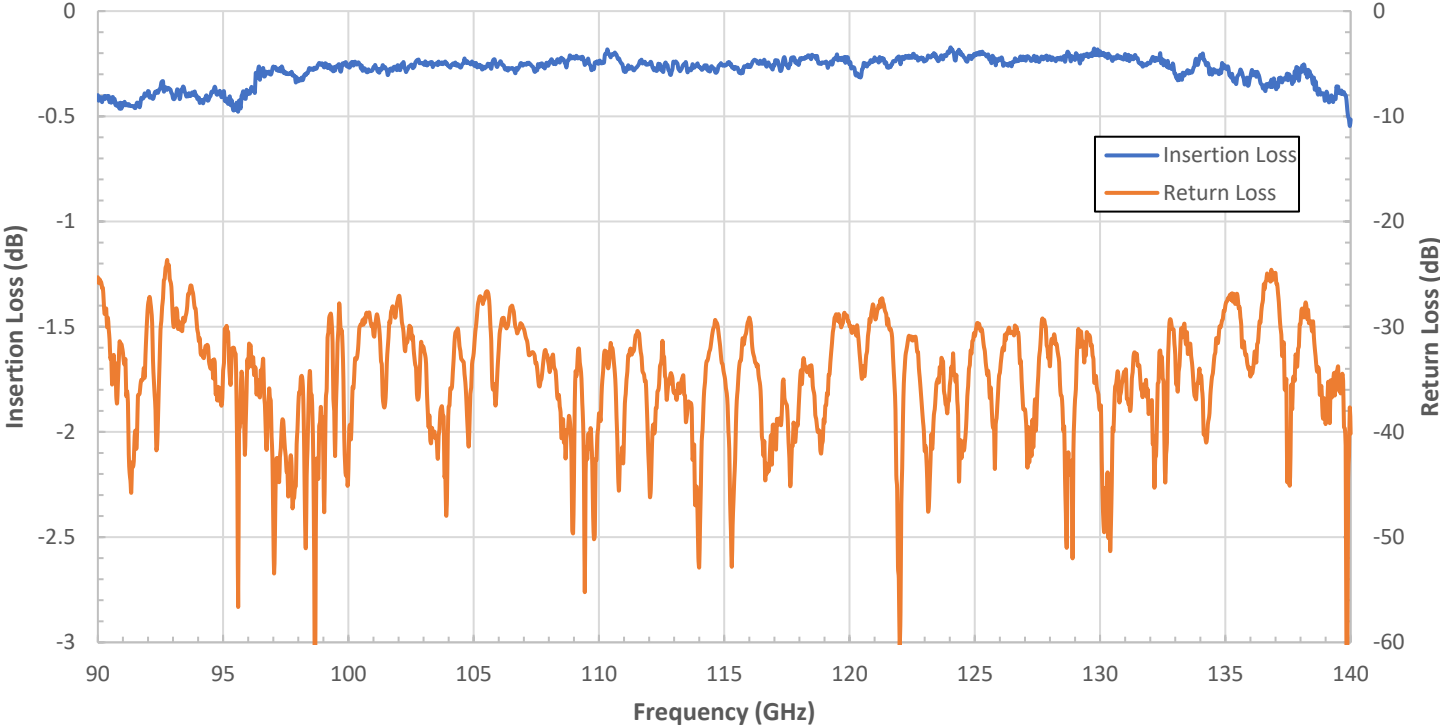
### NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

### CAUTION:

- RF power should never exceed 100 mW.
- Forcing the micrometer down after encountering resistance may damage the resistive sheet inside. This will cause permanent performance degradation and decrease the long-term stability and repeatability of the device.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- Any foreign objects in the antenna will cause performance degradation and possible device damage.
- For 1 mm connectors proper torque should be applied:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm). Torque wrench model [SCH-06004-S1](#) is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model [SCH-08008-S1](#) is highly recommended

Typical Measured Performance vs Frequency



MAKING MILLIMETERWAVE ACCESSIBLE



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