

## STP-18-10-M1-C-1.2

### WR-10 Compact Micrometer Driven Phase Shifter

**STP-18-10-M1-C-1.2** is a WR-10 compact micrometer driven phase shifter that covers the frequency range from 75 to 110 GHz. The phase shifter is an ideal piece of equipment in waveguide systems where broadband phase shifting is required. The phase shifter exhibits a 0.3 dB typical insertion loss and an adjustable phase range of up to 180 degrees.



#### Electrical Specifications:

| Parameter                 | Minimum | Typical | Maximum     |
|---------------------------|---------|---------|-------------|
| Frequency Range           | 75 GHz  |         | 110 GHz     |
| Insertion Loss            |         | 0.3 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-10 Waveguide with UG-387/U-M Anti-Cocking Flange |
| Setting Type          | Micrometer Head                                     |
| Micrometer Pitch      | 0.5mm   |
| Micrometer Resolution | 0.01mm  |
| Insertion Length      | 1.20"   |
| Material              | Aluminum  |
| Finish                | Gold Plated   |
| Weight                | 3.5 Oz  |
| Outline               | TA-MW-A-1.2   |

#### ECCN

EAR99

#### FEATURES

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

#### APPLICATIONS

- Test Lab
- Instrumentations
- Manual Test Set

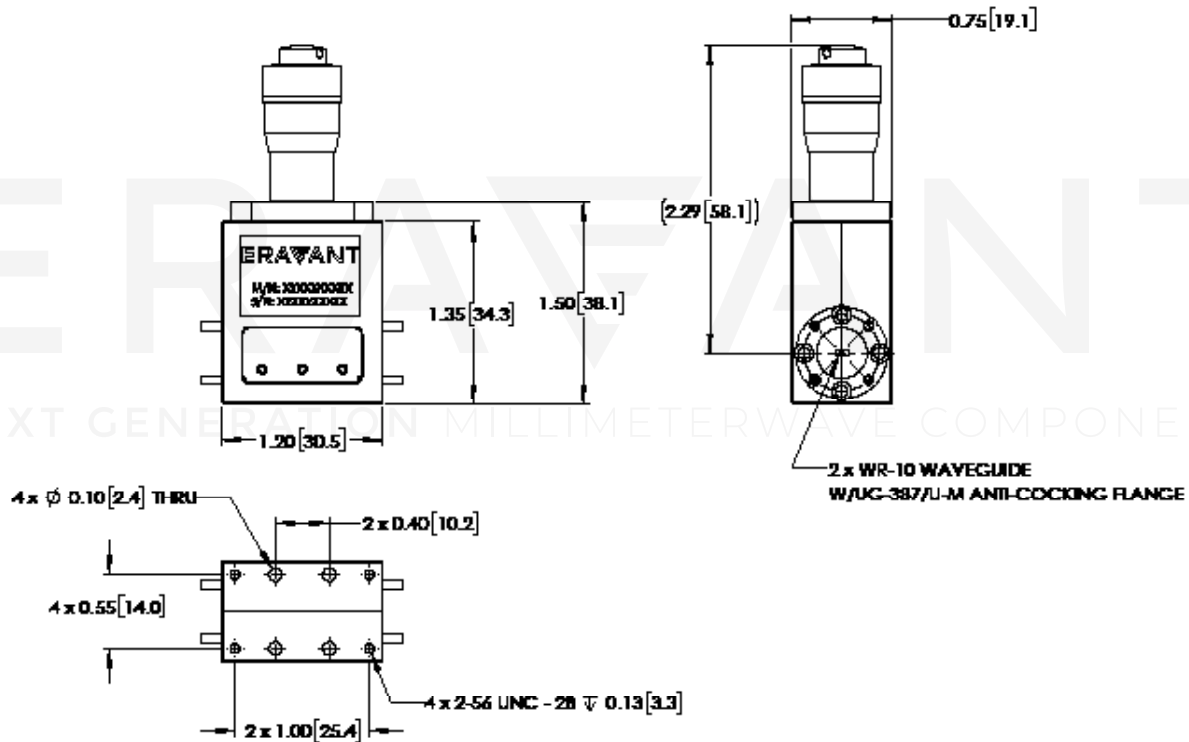
#### SUPPLEMENTAL DETAILS



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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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- 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.

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Typical Measured Performance vs Frequency

