STP-18-04-M1-C-1.2

WR-04 Compact Micrometer Driven Phase Shifter

STP-18-04-M1-C-1.2 is a WR-04 compact micrometer driven phase shifter that covers the frequency range from 170 to 260 GHz. The phase shifter is an ideal piece of equipment in waveguide systems where broadband phase shifting is required. The phase shifter exhibits a 2.3 dB typical insertion loss and an adjustable phase range of up to 180 degrees.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	170 GHz		260 GHz
Insertion Loss		2.3 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-04 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-M04-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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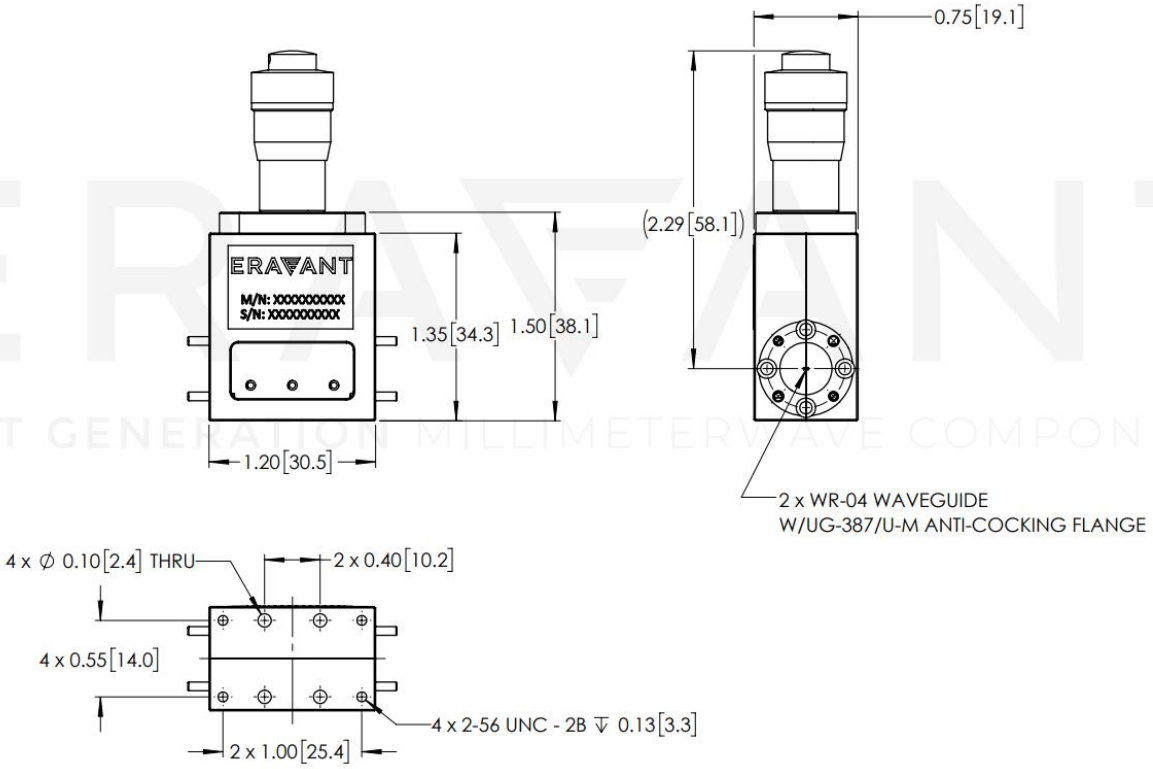
Mechanical Outline:

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 ± 0.15 inch-pounds (0.45 ± 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 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended

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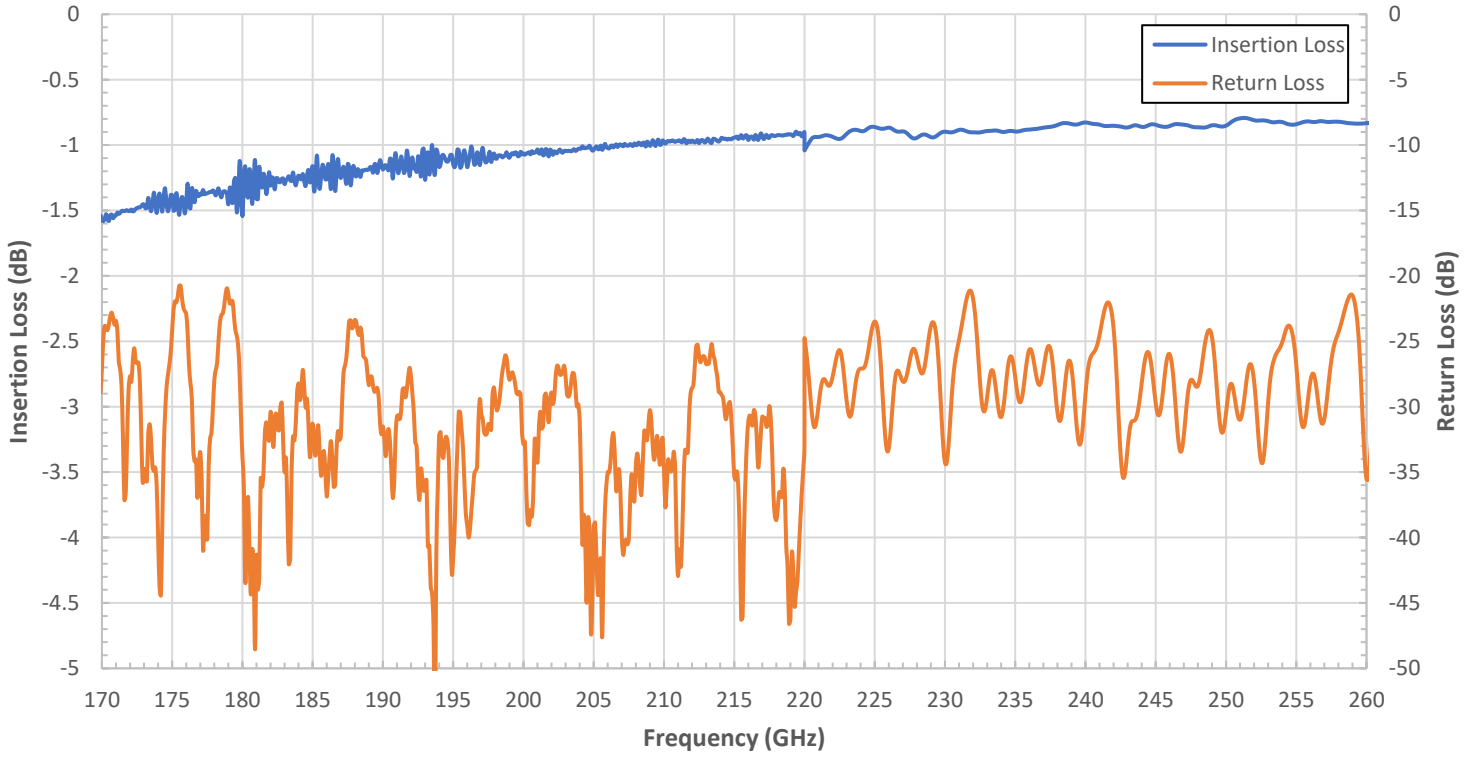
Typical Measured Performance vs Frequency



MAKING MILLIMETERWAVE ACCESSIBLE

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