STP-18-06-M1-C-1.2

WR-06 Compact Micrometer Driven Phase Shifter

STP-18-06-M1-C-1.2 is a WR-06 compact micrometer driven phase shifter that covers the frequency range from 110 to 170 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 1.2 dB typical insertion loss and an adjustable phase range of up to 180 degrees.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	110 GHz		170 GHz
Insertion Loss		1.2 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-06 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-MD-A-1.2	

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Compact SizeHigh Resolution Micrometer

FEATURES

ECCN EAR99

Low Insertion Loss

Full Band Coverage

APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

SUPPLEMENTAL DETAILS

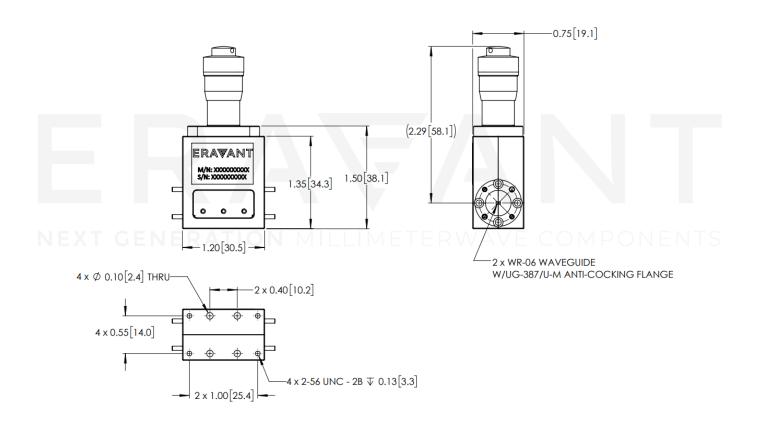


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Mechanical Outline:

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 <u>SCH-06004-S1</u> 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 <u>SCH-08008-S1</u> is highly recommended

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0 0 Insertion Loss Return Loss -0.5 -10 -20 -1 Insertion Loss (dB) Return Loss (dB) -30 -1.5 -2 -40 -2.5 -50 -3 -60 115 120 125 130 135 140 145 150 155 170 110 160 165 Frequency (GHz)

Typical Measured Performance vs Frequency

ERAFANT MAKING MILLIMETER WAVE ACCESSIBLE

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