

#### **E-Band Micrometer Driven Phase Shifter**

### **Description:**

Model STP-18-12-M2 is an E Band micrometer driven phase shifter that covers the frequency range of 60 to 90 GHz. The phase shifter has a micrometer dial which allows for repeatable phase shift settings. The phase shifter is an ideal piece of equipment in waveguide systems where broadband phase shifting is required. The phase shifter exhibits a 0.5 dB typical insertion loss and an adjustable phase range of up to 180 degrees.



#### Features:

- Full Band Coverage
- Low Cost
- Convenient Mechanical Setting

# **Applications:**

- Test Lab
- Instrumentations
- Manual Test Set

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
RF Frequency	60 GHz		90 GHz
Insertion Loss		0.5 dB	
Phase Shifting	0 to 180°		
Return Loss		20 dB	
Power Handling		600 mW	800 mW
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

# **Mechanical Specifications:**

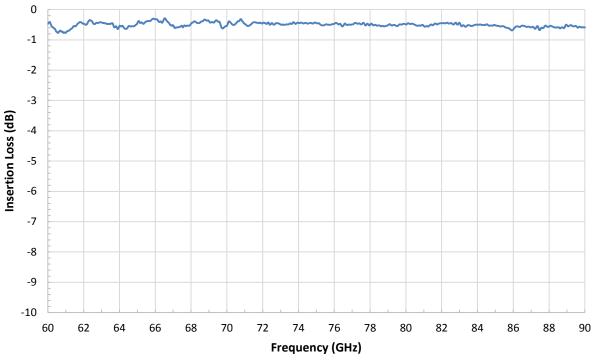
Item	Specification	
RF Ports	WR-12 Waveguide with UG-387/U Flange	
Setting	Micrometer Head	
Flange Material	Brass	
Finish	Gold Plated Waveguide Faces; Black Painted Body	
Weight	4 Oz	
Insertion Length	3"	
Outline	TP-ME-BX1	



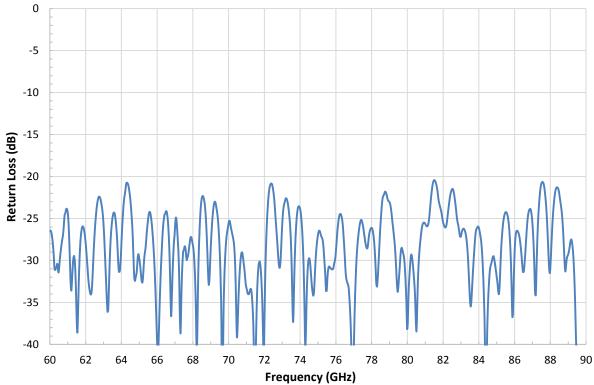
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### **E-Band Micrometer Driven Phase Shifter**

### **Typical Insertion Loss vs. Frequency**



# **Typical Return Loss vs. Frequency**

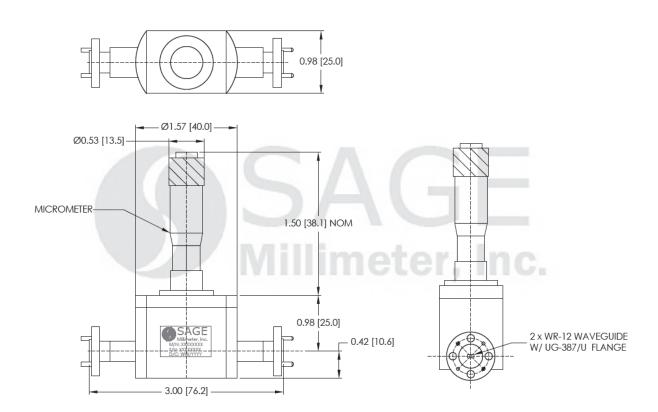




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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



#### Note:

- All data presented is collected from a 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:

- Exceeding absolute maximum ratings shown will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.



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