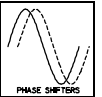


**PS-4 Series****PHASE SHIFTERS, MANUAL**

10 to 100 MHz / 0° to 180° Continuous Plus 0°/180° Switch / 10% Bandwidth / BNC Connectors

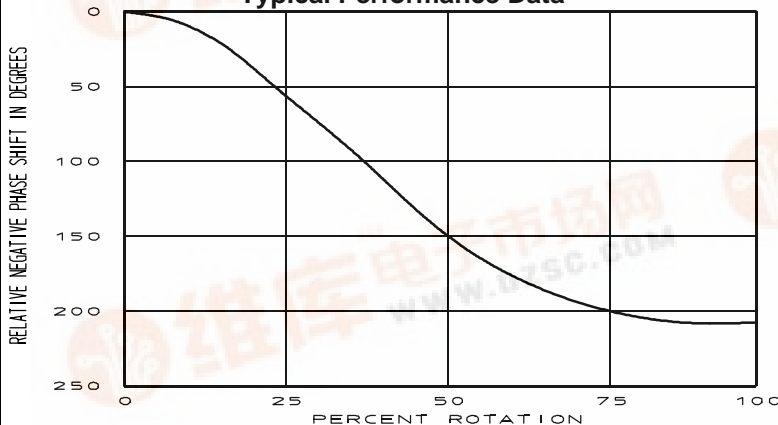
**PRINCIPAL SPECIFICATIONS**

Model Number	Center Frequency, $f_0$ , MHz	Usable Bandwidth, MHz
PS-4-30	30	28.5 - 31.5
PS-4-***B	10 to 100	$f_0 \pm 5\%$

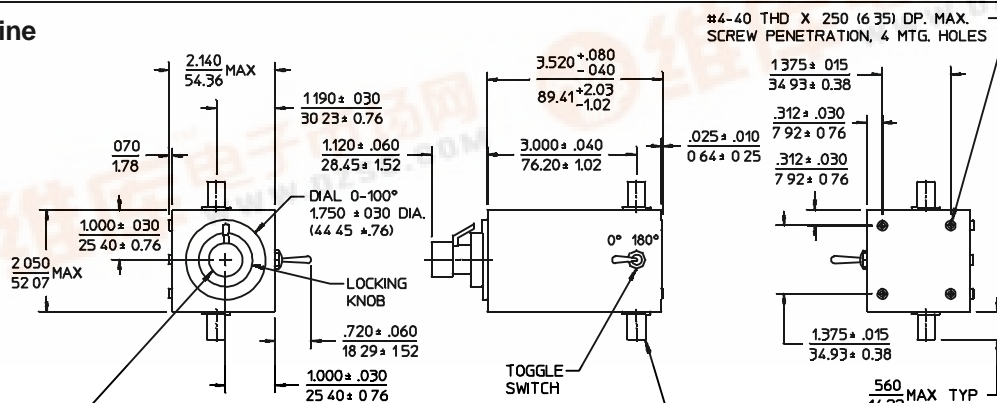
For complete Model Number replace \*\*\* with desired Center Frequency,  $f_0$  in MHz.**GENERAL SPECIFICATIONS**

Phase Shift Range: 360° min. @  $f_0$   
 Insertion Loss: 1.75 dB max.  
 Impedance: 50  $\Omega$  nom.  
 VSWR: 1.75:1 max  
 CW Power: 1 Watt max.  
 Drive: Knob/Lock plus Toggle Switch

Drive Rotation for maximum phase shift: Half-Turn nom.  
 Connectors: BNC Female  
 Weight: 10 oz. (285 g)  
 Operating Temp: -55° to +85°C

**Typical Performance Data****General Notes:**

1. The PS-4 series mechanically adjusts phase continuously from 0° to 180°. A mechanical switch inserts an additional 180° switched shift for a total of range of 0° to 360°. A lock is included to avoid unintentionally changing the selected setting.
2. These models employ a lumped element quadrature hybrid with a matched pair of L-C networks acting as sliding short circuits on the outputs. The electrical length of the short effectively delays the reflected signal which appears at the isolated port of the quadrature hybrid.
3. Merrimac phase shifters can be supplied screened for specific applications.

**Package Outline**

CONNECTOR, RECEPTACLE, FEMALE, BNC TYPE, MATES WITH CONNECTOR, PLUG, MALE PER MIL-C-39012 TYP 2 PLACES

- NOTES:
1. Tolerance on 3 place decimals  $\pm 0.20(.51)$  except as noted.
  2. Dimensions in inches over millimeters.
  3. Phase shift is negative with clockwise rotation of knob.
  4. Dial is uncalibrated.

22Feb96

