



PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, f_0 , MHz	Phase Shift Range at f_0	Usable Bandwidth
PSM-4E-***B	10 to 100	360° min.	$f_0 \pm 5\%$

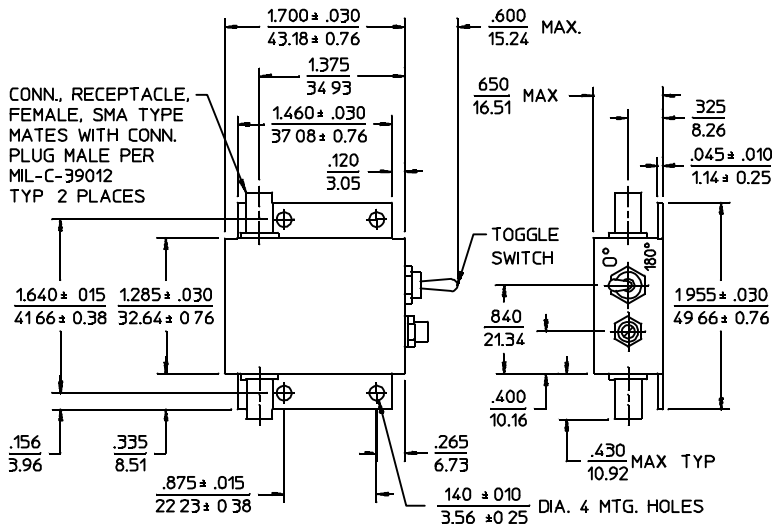
For complete Model Number replace ***with desired Center Frequency, f_0 in MHz.

GENERAL SPECIFICATIONS

Insertion Loss: 1.75 dB max.
 Impedance: 50 Ω nom.
 VSWR: 2.0:1 max
 CW Power: 1 Watt max.
 Screw Drive: 32 turns nom., plus toggle switch

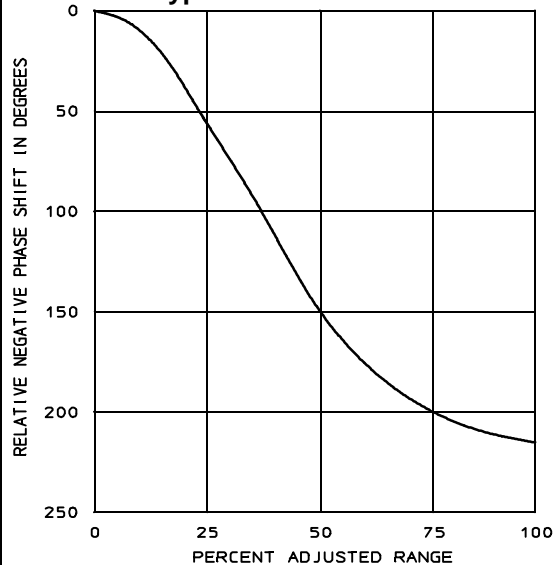
Control direction for increasing phase shift: Clockwise
 Weight, nominal: 1.5 oz. (42 g)
 Operating Temp: -55° to +85°C

Package Outline



NOTES: 1. Tolerance on 3 place decimals $\pm .020(.51)$ except as noted.
 2. Dimensions in inches over millimeters.

Typical Performance



General Notes:

- The PSM-4E series of Phase Shifters provides continuously variable phase shift across the range of 0° to 180°. An additional 180° phase shift can be switched in to provide a total range of 360°.
- To realize variable phase shifts, 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 that appears at the isolated port of the quadrature hybrid.
- Merrimac phase shifters are designed for high reliability and can be supplied screened for specific applications.

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