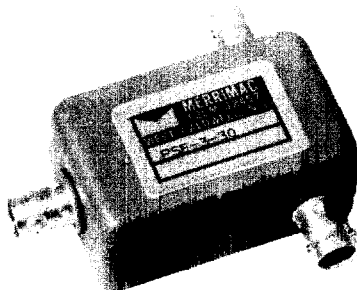


PSE & PSEM Series

1 to 500 MHz / 0° to 180° and 0° to 360° / 10% Bandwidth / Voltage Variable / BNC & SMA



PRINCIPAL SPECIFICATIONS

Model Number, BNC	Model Number, SMA	Center Frequency, MHz
PSE-3 & 4-**B	PSEM-3 & 4-**B	1 to 500

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

GENERAL SPECIFICATIONS

PSE/PSEM-3

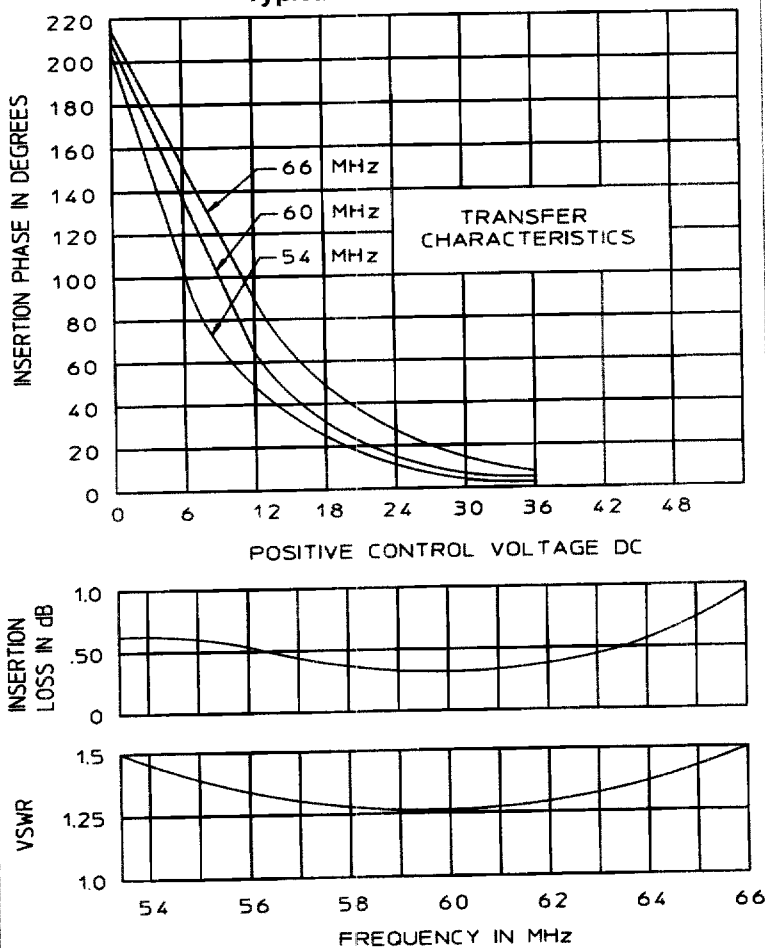
Phase Shift Range:	180° min. @ f_0
Insertion Loss:	1.5 dB max.
Bandwidth:	10% of f_0
Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
Modulation Rate:	1% of f_0 max.
Input Power:	0 dBm max.*
Control Voltage:	0.5 to +15V typ.**
Weight, nominal:	3.4 oz (95 g)
Phase Stability:	0.1° per °C typ.
Operating Temp:	-55° to +85°C

PSE/PSEM-4

Phase Shift Range:	360° min. @ f_0
Insertion Loss:	2.0 dB max.
Bandwidth:	10% of f_0
Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
Modulation Rate:	1% of f_0 max.
Input Power:	0 dBm max.*
Control Voltage:	0.5 to +15V typ.**
Weight, nominal:	4 oz (112 g)
Phase Stability:	0.2° per °C typ.
Operating Temp:	-55° to +85°C

*For freq ≥ 10 MHz, unit may be operated at +10 dBm in reduced control range of 1.5 - 15 V (+30 V no damage).
 ** Voltage required for full control range. Maximum control voltage is 30 V.

Typical of PSE-3-60

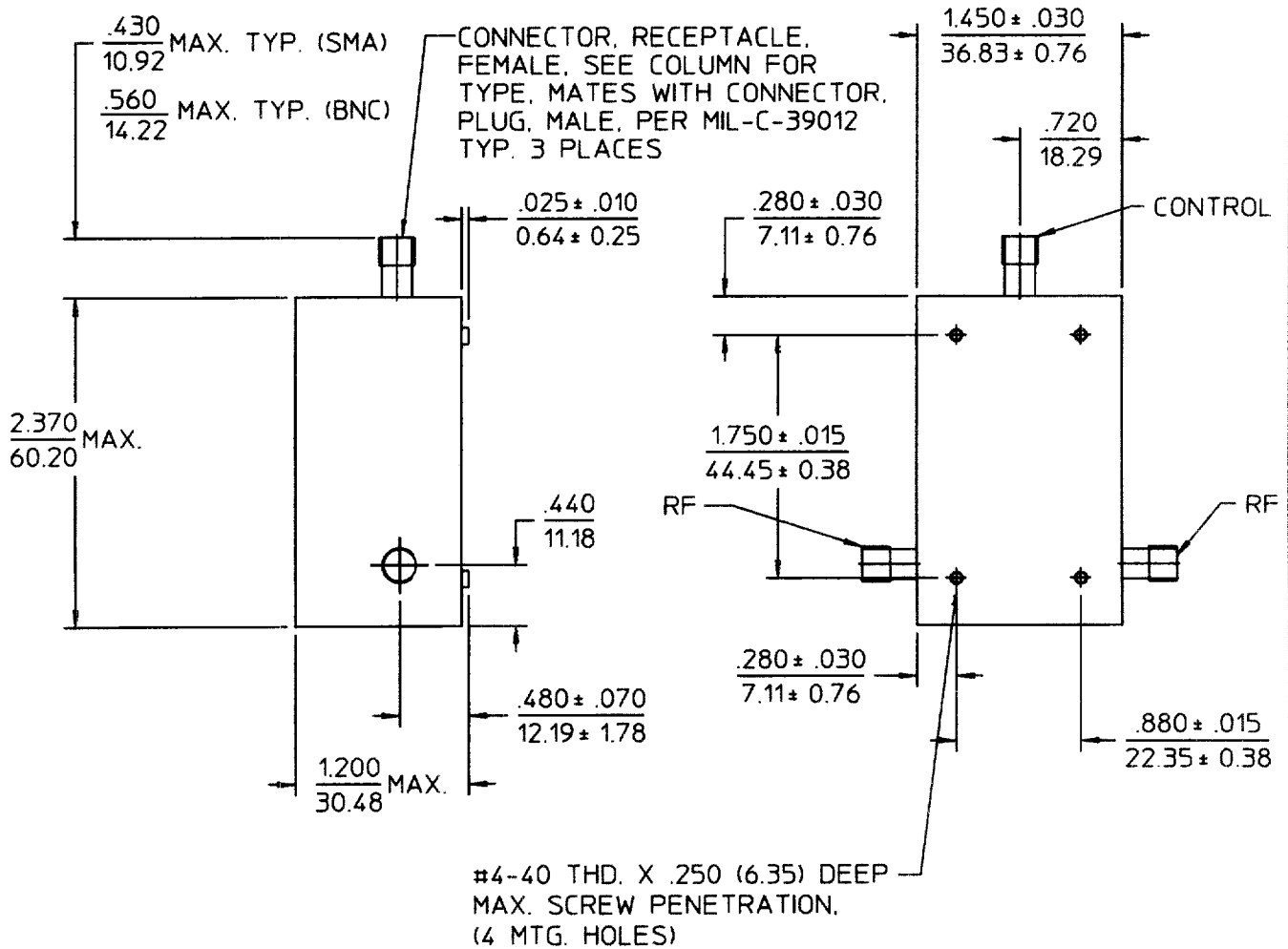


General Notes:

- The PSE and PSEM series of phase shifters provide continuous voltage controlled phase adjustment with the application of 0 to +15V. On PSE/PSEM-3 models the full range is 180°. On PSE/PSEM-4 models the range is extended to 360° by cascading two similar 180° phase shifters in one package. All models may be supplied with optional linearized transfer characteristics.
- Merrimac phase shifters are designed for high reliability and can be supplied screened to meet specific military and space applications.



Package Outline



- Notes: 1. Tolerance on 3 place decimals $\pm 0.20(.51)$ except as noted.
 2. Dimensions in inches over mm.