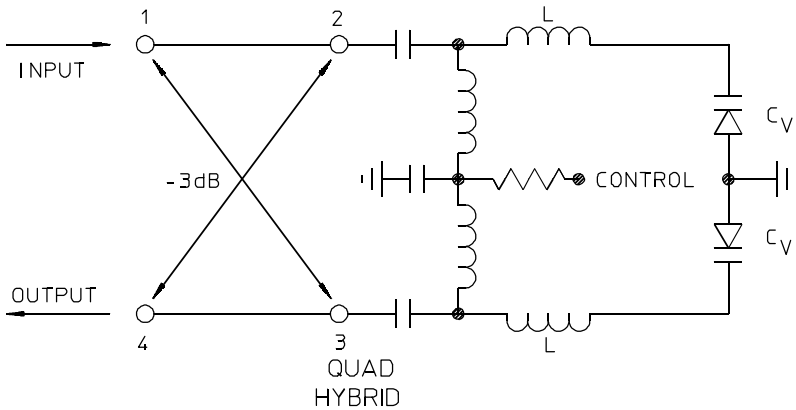


# PEG-3E Series

# PHASE SHIFTERS

Units to 500 MHz / Continuous 0° to 180° Adjustment / Voltage Controlled / Low Insertion Loss



## PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, $f_0$ , MHz	Bandwidth RF
PEG-3E-***B	25 - 500	10% of $f_0$

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

### General Notes:

- The PEG-3E series of voltage controlled phase shifters uses a lumped element design for high performance in a space saving surface mount package.
- Phase control is achieved by the application of a 0 - 15 Volt control signal which can be modulated at rates up to 1% of the RF center frequency. This signal varies the capacitance of two varactor diodes that form part of a tuned LC circuit connected across the output ports of a 90° quadrature hybrid. The change in the reactance causes a shift in the phase of an RF signal passed through the hybrid.
- These Phase Shifters are designed for high reliability and can be supplied screened to meet military and space applications.

## GENERAL SPECIFICATIONS

### RF Characteristics

Phase Shift Range:	180° min. @ $f_0$
Insertion Loss:	1.75 dB max.
Impedance:	50 $\Omega$ nom.
VSWR:	1.6:1 max.
Input Power:	0 dBm max.*

### Control Characteristics

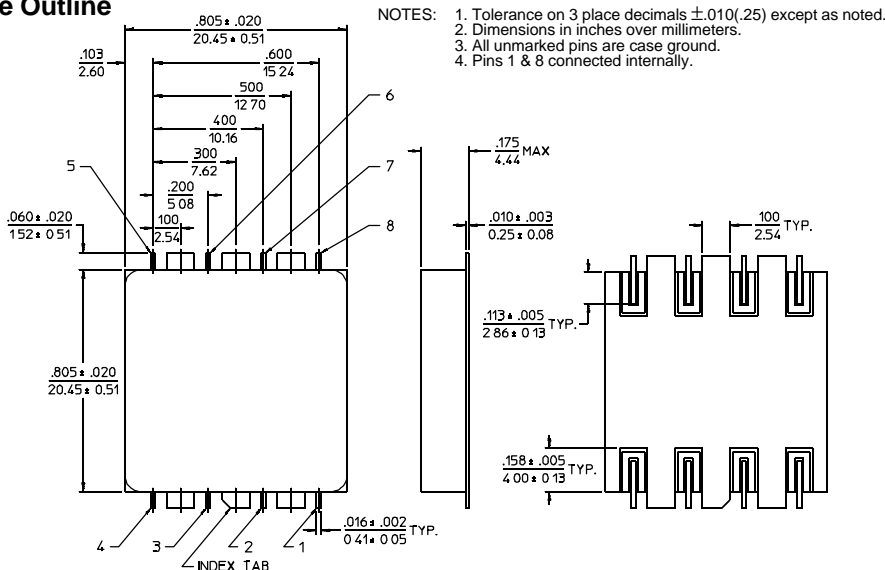
Control Voltage:	0.5 to +15 V typ. 0.5 to +30 V max.
Modulation Rate:	1% of $f_0$ max.

### General Characteristics

Phase Stability:	0.1°/°C
Weight, nominal:	0.32 oz. (9 g)
Operating Temp:	-20° to +85°C

\*Unit may be operated at +10 dBm in reduced control range of 1.5 - 15 V. (+30V no damage.)

## E-Package Outline



PIN NO.	FUNCTION
1	Control
2	Ground
3	Ground
4	RF
5	RF
6	Ground
7	Ground
8	Control

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