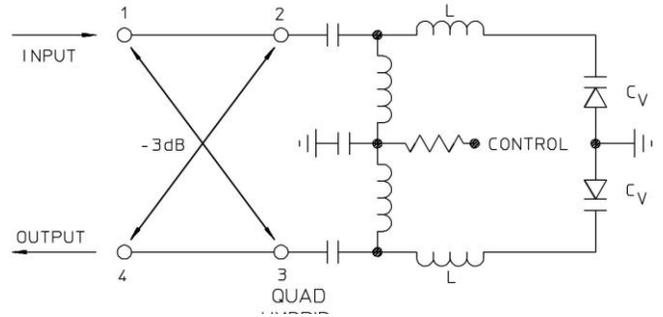


# PEF-03A SERIES – PHASE SHIFTERS

## TECHNICAL FEATURE

### FEATURES

- 500 to 1500 MHz
- Continuous 0° to 180° Adjustment
- Voltage Controlled
- Low Insertion Loss



### PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, $f_0$ , MHz	Bandwidth
PEF-03A-***B	500 – 1500	10% of $f_0$

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

### GENERAL SPECIFICATIONS

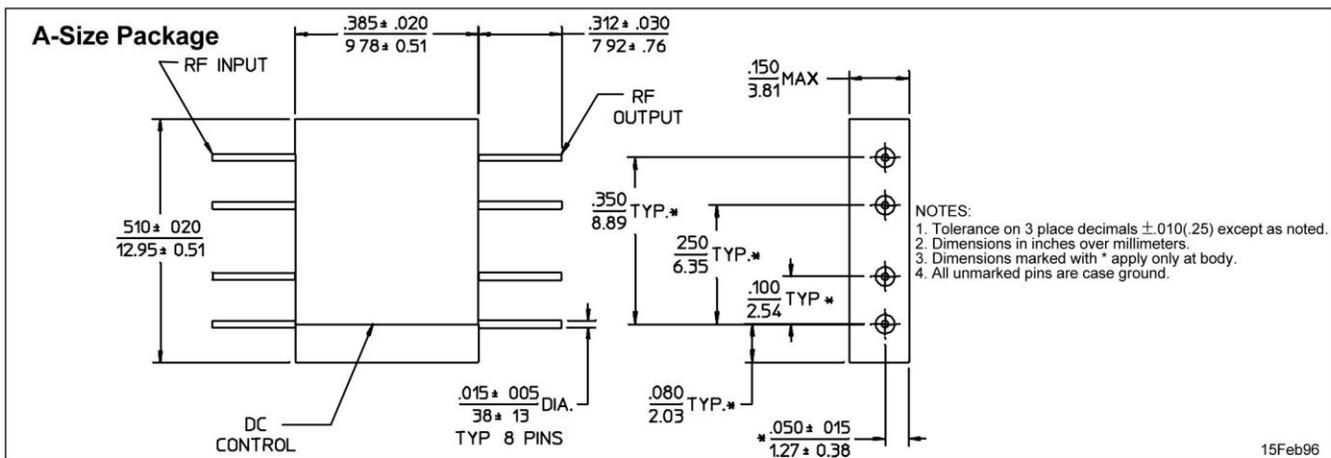
<b>RF Characteristics</b>	
Bandwidth:	10% min.
Phase Shift Range:	0 to 180° min.
Impedance:	50 $\Omega$ nom.
VSWR:	2.0:1 max.
RF Input Level:	0 dBm max.
Insertion Loss:	
1000 - 2000	3 dB max.
500 - 1000	2 dB max.
<b>Control Characteristics</b>	
Control Voltage	0 to +30 VDC
Modulation Rate:	DC to 1% $f_0$
<b>General Characteristics</b>	
Phase Stability:	0.2° per °C
Weight, nominal:	0.09 oz. (2.5 g)
Operating Temp:	-55° to +85°C

### General Notes:

1. The PEF series of high frequency, voltage controlled phase shifters combines the latest microstrip and lumped element technologies to provide very high performance in a space saving package.
2. With a center frequency of up to 1500 MHz, these units extend the frequency range of the long established PSEF series which cover the 10 to 500 MHz band.
3. These phase shifters are suitable for systems requiring automatic phase control, closed loop networks and steering of electronically scanned antennas.
4. Merrimac Phase Shifters are designed for high reliability, and can be supplied screened to meet military and space applications.

### AVAILABLE OPTIONS

Lower Frequencies:	Down to 10 MHz in PSEF series only.
RF Bandwidth:	Up to 20% of $f_0$
Control:	Negative polarity



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PEF03A.doc. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors. We reserve the right to make changes in products or specifications without notice. Copyright © 2013 Crane Electronics, Inc. All rights reserved.

