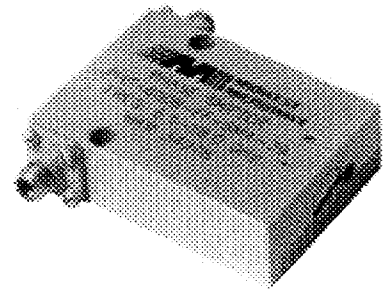
Phase Shifters

Harmonic Type

360 ° Field Adjustable Phase Shift

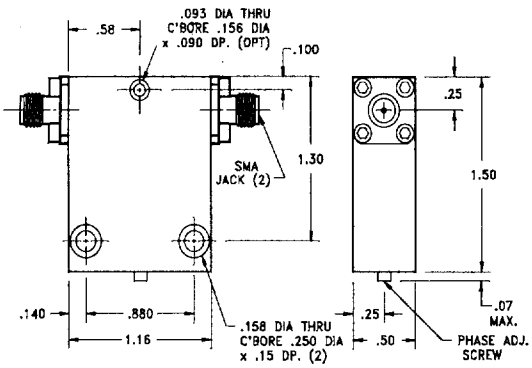
- **Broadband Performance**
- **Low VSWR and Insertion Loss**
- **Smooth Continuous Adjustment**
- **Meets Mil-E-5400 and Mil-E16400 Environment**



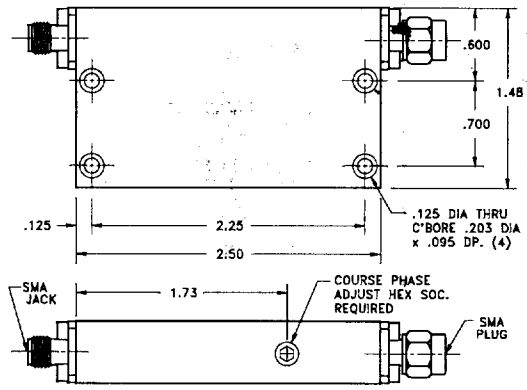
Midwest Microwave's series of Harmonic Phase Shifters are designed to provide maximum harmonic phase shift over very broadband frequency ranges. They are small, lightweight, ruggedly constructed units that posses consistently low VSWR and insertion loss. They also provide smooth, continuous, and easy phase adjustment through the use of a simple mechanical screw and locking arrangement.

SPECIFICATIONS

Fundamental Frequency: **2.5-5.0 GHz and 4.8-5.5 GHz,**
Harmonic Frequency: **5.0- 10.0 and 9.6-11.0 GHz**
Impedance: **50 Ohms**
VSWR: **1.7:1 in Fundamental frequency band typical**
2.0:1 in harmonic frequency band typical
see table below
Insertion Loss: **0.8 dB max in fundamental frequency band**
1.0 dB max in harmonic frequency band
Power: **2 Watts average, 2 Watts Peak**
Operating Temperature: **-55 °C - +125 °C**
Connectors: **Passivated Stainless Steel SMA***



Model No. PHS-6017-FF-SMA-79



Model No. PHS-6012-FF-SMA-79

Frequency (GHz)		Model Number	Harmonic Phase Shift	VSWR		Insertion Loss	
Fundamental	Harmonic		(degrees)	Fundamental	Harmonic	Fundamental	Harmonic
2.5 - 5.0	5.0 - 10.0	PHS-6017-FF-SMA-79	360	1.50	1.70	0.80	1.00
4.8 - 5.5	9.6 - 11.0	PHS-6012-FF-SMA-79	360	1.75	2.00	0..80	1.00

Note: SMA male , TNC, or Type N output connectors, either male or female, are also available by substituting TNC or NNN for SMA in the Model Number. If an interface gender change is desired, substitute MM or MF for FF in the Model Number. Please note that the housing thickness will increase accordingly when larger connectors are selected.