



Analog Phase Shifter, 5 GHz to 18 GHz, with an Adjustable Phase of 40 Deg. Per Volt and SMA

Phase Shifters and Trimmers Technical Data Sheet

PE82P2000

Features

- Analog Phase Shifter
- 5 GHz to 18 GHz Frequency Range
- 400 Deg Typ Phase Shift
- 0 - 10 VDC Control Voltage Range
- Phase Voltage Sensitivity: 40 Deg/Volt
- 1 Watt CW Max Input Power
- Insertion Loss 6 dB Typ
- 50 MHz Modulation Bandwidth
- Insertion Phase Temp Sensitivity: 0.5 Deg/Volt

Applications

- Electronic Warfare
- Test & Measurement
- Military & Space
- Radar
- Military Communications Systems
- Phased Arrays
- Tracking Systems
- Direction Finding Systems
- Antenna Test
- Noise Cancelling Systems
- Frequency Translation
- Deep Space Surveillance

Description

The PE82P2000 is an Analog Phase Shifter with 400 Deg Typ Phase Range with a Control Voltage Range of 0 to 10 VDC and a Modulation Bandwidth of 50 MHz over the Operating Frequency Range from 5 GHz to 18 GHz. The rugged, compact, and slimline pin package supports field replaceable connectors which can be removed for drop-in surface mount applications. This design operates over a temperature range of -55°C to +85°C and meets MIL-STD-202 environmental test conditions for Humidity, Shock, Altitude, and Temperature Cycle for high reliability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	5		18	GHz
Phase Adjustment		40		Deg/GHz
Control Voltage	0		10	Volts
Phase Voltage Sensitivity		40		Deg/Volt
Input Return Loss		8		dB
Output Return Loss		8		dB
Insertion Loss			12	dB
Modulation Bandwidth		50		MHz
Phase Temperature Sensitivity		0.5		Deg/Volt
Input Power, CW			1	Watt

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Analog Phase Shifter, 5 GHz to 18 GHz, with an Adjustable Phase of 40 Deg. Per Volt and SMA PE82P2000](#)



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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	5 to 10	10 to 13	13 to 18			GHz
Phase Shift, Min	180	135	45			Degrees
Phase Shift, Typ	400	200	120			Degrees
Insertion Loss, Typ	8	4	4			dB
Insertion Loss, Max	12	7	7			dB

Absolute Maximum Rating

Parameter	Rating	Units
Control Voltage	11	Vdc
Reverse Current	5	mA
Input Power (CW)	+30	dBm

Electrical Specification Notes:
Insertion Phase Temperature Sensitivity is 0.5 Deg/Volt

Mechanical Specifications

Size

Length	1.08 in [27.43 mm]
Width/Diameter	0.71 in [18.03 mm]
Height	0.29 in [7.37 mm]
Weight	0.03 lbs [13.61 g]

Configuration

Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-55 to 85 deg C
Storage Range	-65 to 150 deg C

Humidity

Shock	MIL-STD-202F, METHOD 213B COND. B
Altitude	MIL-STD-202F, METHOD 105C COND. B
Temperature Cycle	MIL-STD-202G, METHOD 107D COND. A

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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

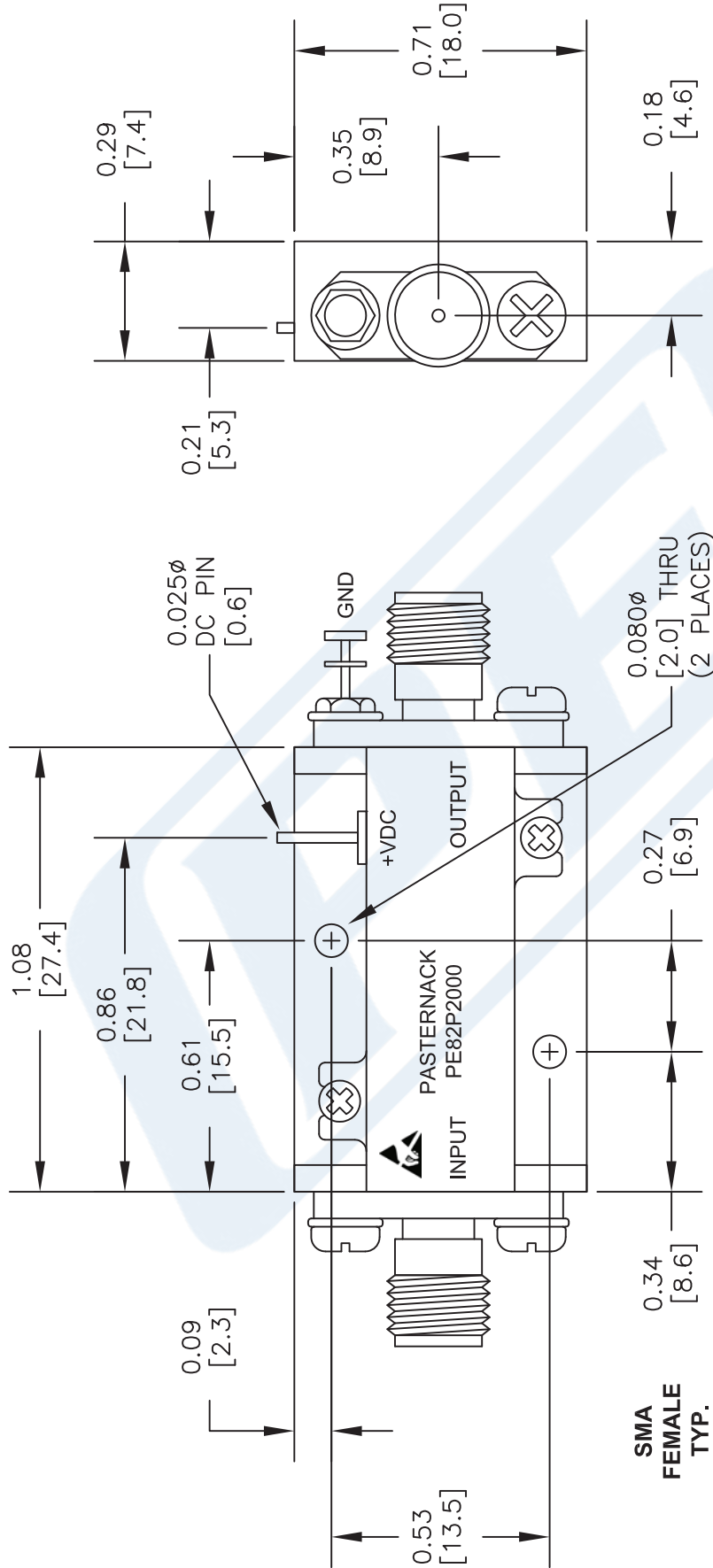
Analog Phase Shifter, 5 GHz to 18 GHz, with an Adjustable Phase of 40 Deg. Per Volt and SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/analog-phase-shifter-18-ghz-40-deg-per-volt-sma-pe82p2000-p.aspx>

PE82P2000 CAD Drawing

Analog Phase Shifter, 5 GHz to 18 GHz, with an Adjustable Phase of 40 Deg. Per Volt and SMA



DWG TITLE

PE82P2000

NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

FSCM NO. 53919

CAD FILE 092914

SCALE N/A

SIZE A

2233



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