



Adjustable Phase Shifter, DC to 4GHz, With an Adjustable Phase of 180 Deg. Per GHz and SMA

## Phase Shifters and Trimmers Technical Data Sheet

**PE82P5010**

### Features

- Phase Tuning Range: 0 to 720 degrees
- Rotary Dial Design for Continuous Adjustment
- Frequency Range from DC to 4GHz
- SMA Female Connectorized Design
- Max VSWR 1.5:1
- Max Power Rating: 100 Watts (CW)
- Insertion Loss: 2 dB Max

### Applications

- Test & Measurements
- Radar Development
- Military Communications Systems
- Phase Array Antenna System
- Satellite Communications

### Description

Pasternack's PE82P5010 is a phase shifter that has phase adjustment range of 180 degrees per GHz with precision rotary dial design for controllable phase adjustment across a frequency range from 0 to 4GHz. With SMA female connectors, this RF phase shifter design is tried and true technology that offers exceptional RF performance characteristics that include 2 dB maximum insertion loss and a maximum VSWR of 1.5:1. Phase shifters are part of Pasternack's comprehensive RF passive product offerings which are available in stock and ready for same-day shipment.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
Impedance		50		Ohms
Phase Shift	0		720	Degrees
Phase Adjustment	0		180	Deg/GHz
VSWR			1.5:1	
Insertion Loss			2	dB
Input Power, CW			100	Watts
Input Power, Peak 5µs pulse, 1% duty cycle			5	kWatts

### Mechanical Specifications

#### Size

Length	14.65 in [372.11 mm]
Width/Diameter	2.99 in [75.95 mm]
Height	1.2 in [30.48 mm]
Weight	1.75 lbs [793.79 g]
Body Material and Plating	Aluminum

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Adjustable Phase Shifter, DC to 4GHz, With an Adjustable Phase of 180 Deg. Per GHz and SMA PE82P5010](#)



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### Configuration

Input Connector	SMA Female
Output Connector	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	-10 to 50 deg C
Storage Range	-40 to 70 deg C

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

### Plotted and Other Data

Notes:

Adjustable Phase Shifter, DC to 4GHz, With an Adjustable Phase of 180 Deg. Per GHz 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.

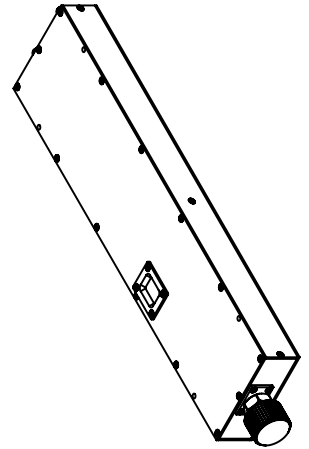
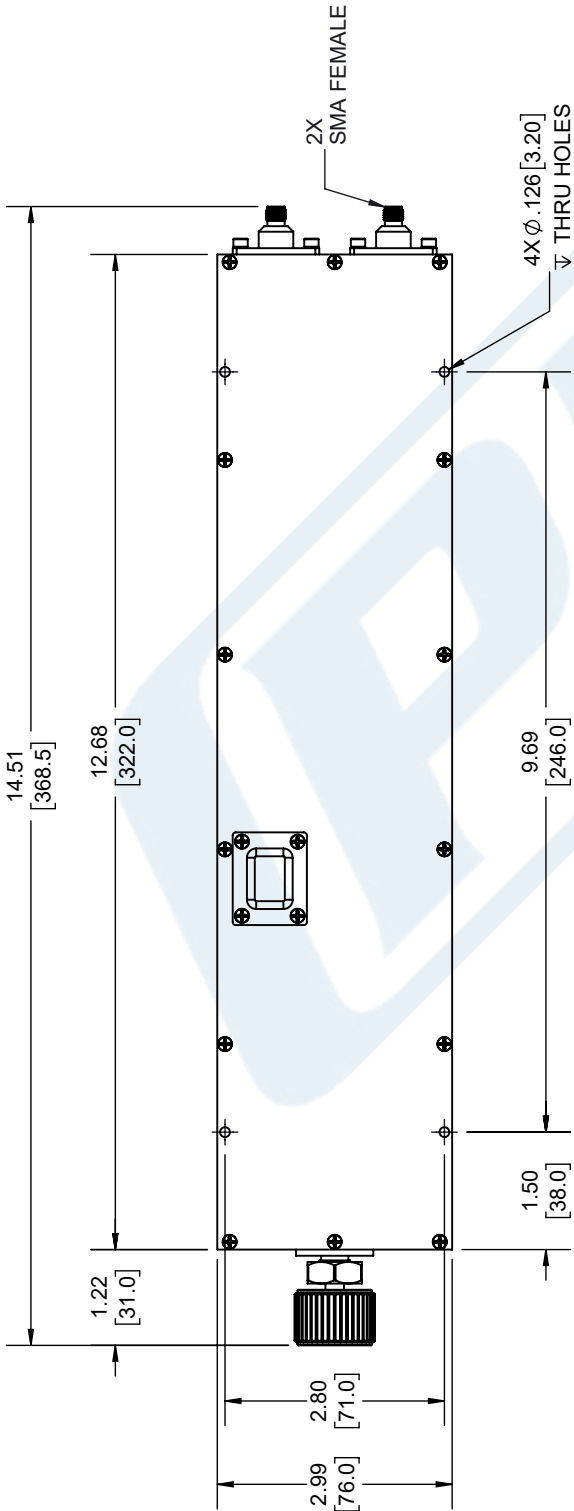
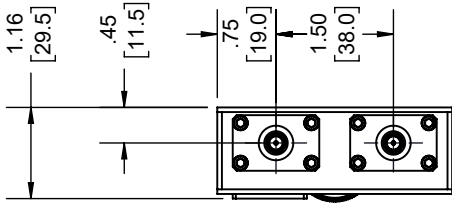
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URL: <https://www.pasternack.com/adjustable-phase-shifter-4-ghz-180-deg-per-ghz-sma-pe82p5010-p.aspx>

# PE82P5010 CAD Drawing

Adjustable Phase Shifter, DC to 4GHz, With an Adjustable Phase of 180 Deg. Per GHz and SMA

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/13/2022	S. PONG



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08] | FRACTIONS ± 1/32  
 .XX = ±.02 [ .51] | ANGLES ± 1°  
 .XXX = ±.005 [ .13] |  
 CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
 an INFINITE brand

Pasternack Enterprises, Inc.  
 P. O. Box 16759, Irvine, CA 92623.  
 Phone: 1.949.261.1920 | 1.866.727.8376  
 Fax: 1.949.261.7451  
 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

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 SHEET 1 OF 1  
 SCALE N/A

SIZE A | CAGE CODE 53919 | DRAWN BY K.DANG | ITEM NO. PE82P5010 | REV A

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