



## 90 Degree SMA Hybrid Coupler from 1 GHz to 2 GHz Rated to 50 Watts

### Hybrids Technical Data Sheet

PE2CP013

#### Features

- 90° Hybrid Coupler
- 1 to 2 GHz Frequency Range
- Isolation > 22 dB
- VSWR < 1.3:1
- Max Power 50 Watt (CW)

#### Applications

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

#### Description

The PE2CP013 is a 90 degree hybrid coupler that operates from 1 to 2 GHz and can handle up to 50 Watts (CW) with 22 dB isolation minimum and 1.3:1 VSWR maximum. The package interface uses SMA female connectors, and is RoHS compliant.

The PE2CP013 is part of Pasternack's family of 90 degree hybrid couplers that offer excellent performance featuring high isolation, low insertion loss and VSWR while maintaining great amplitude/phase balance over the entire operating frequency range. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, phased array radar, and any application that requires even power distribution with a 90 degree difference in phase.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		2	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Coupling		3.1		dB
Isolation	22			dB
VSWR			1.3:1	
Phase Balance		2		Degrees
Input Power (CW)			50	Watts

#### Mechanical Specifications

##### Size

Length	1.98 in [50.29 mm]
Width	0.51 in [12.95 mm]
Height	0.43 in [10.92 mm]
Weight	0.069 lbs [31.3 g]

##### Configuration

RF Connector Type	SMA Female
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 Degree SMA Hybrid Coupler from 1 GHz to 2 GHz Rated to 50 Watts PE2CP013](#)



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#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

Storage Range

-55 to +100 deg C

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

#### Plotted and Other Data

Notes:

90 Degree SMA Hybrid Coupler from 1 GHz to 2 GHz Rated to 50 Watts 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.

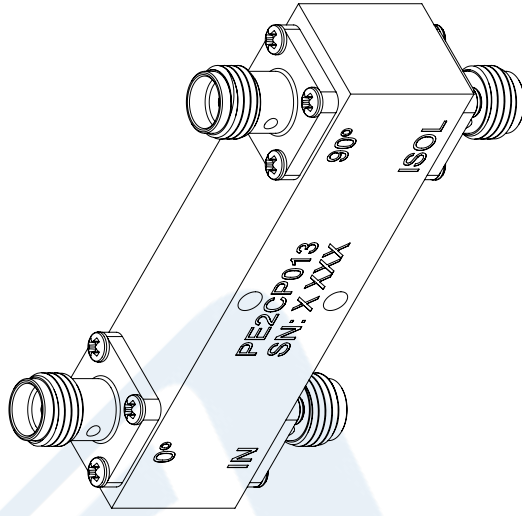
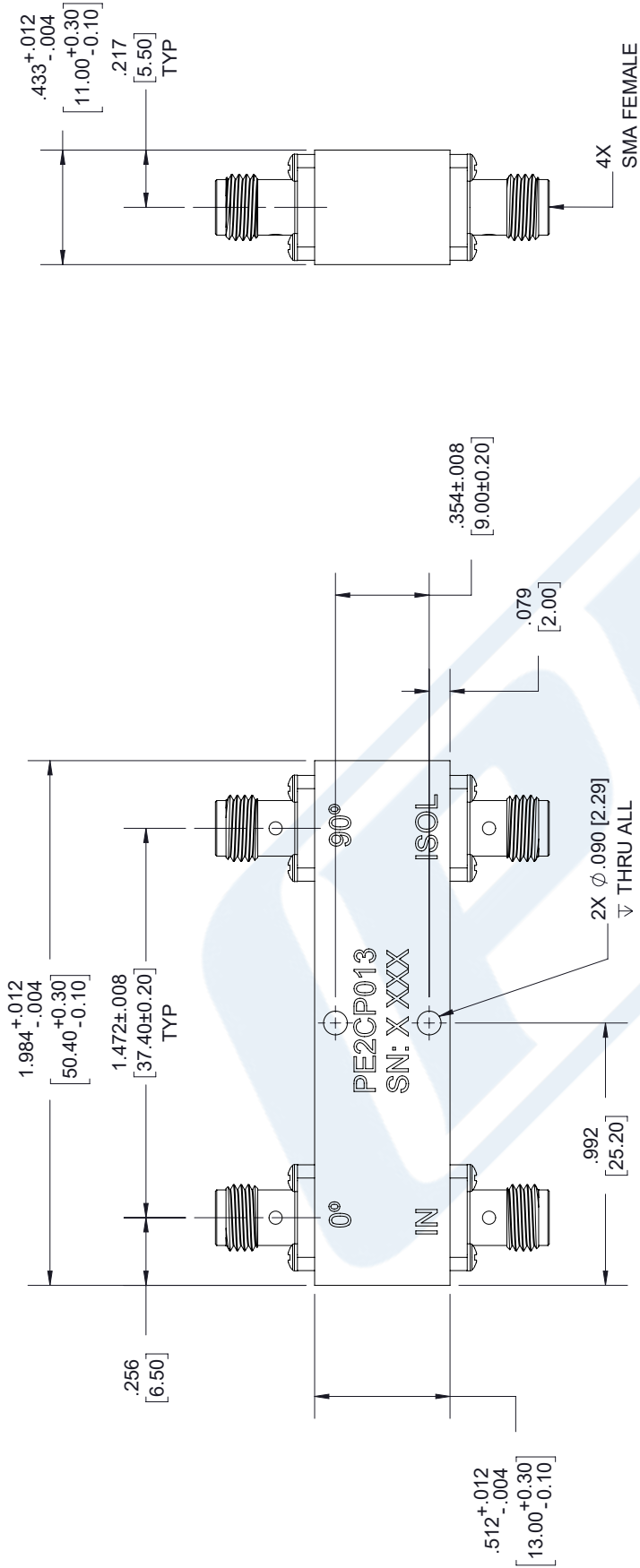
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URL: <https://www.pasternack.com/sma-coupler-2-ghz-pe2cp013-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE2CP013 CAD Drawing

90 Degree SMA Hybrid Coupler from 1 GHz to 2 GHz Rated to 50 Watts



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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DWG TITLE  
 PE2CP013

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].

CAGE CODE 53919

CAD FILE 07/24/18

SCALE N/A

SIZE A

7361