



90 Degree SMA Hybrid Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Hybrids Technical Data Sheet

PE2052

Features

- 90° Hybrid Coupler
- High Power
- 2 to 4 GHz Frequency Range
- Isolation > 22 dB
- Max Power 50 Watts (CW)

Applications

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

Description

The PE2052 is a high power 90 degree hybrid coupler that operates from 2 to 4 GHz and can handle up to 50 Watts (CW) with 22 dB isolation minimum and 1.2:1 VSWR maximum. The package interface uses SMA female connectors, and is REACH and RoHS compliant.

The PE2052 is part of Pasternack's family of 90 degree hybrid couplers in connectorized packages. These quadrature hybrids are excellent for any situation to either equally split an input signal into two paths with a 90 degree phase shift between them or to combine signals while maintaining high isolation between them.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		4	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Coupling		3.1 ±0.8		dB
Isolation	22			dB
VSWR			1.2:1	
Frequency Sensitivity		±0.4		dB
Amplitude Balance		±0.8		dB
Phase Balance		±5		Degrees
Input Power (CW)			50	Watts
Input Power (Peak)			3	KWatts

Electrical Specification Notes:
Coupling includes frequency sensitivity.

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 2 GHz to 4 GHz Rated to 50 Watts PE2052](#)



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Mechanical Specifications

Size

Length	1.15 in [29.21 mm]
Width	0.5 in [12.7 mm]
Height	0.38 in [9.65 mm]
Weight	0.041 lbs [18.6 g]

Configuration

RF Connector Type	SMA Female
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Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

Plotted and Other Data

Notes:

90 Degree SMA Hybrid Coupler From 2 GHz to 4 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% availability and are part of the broadest selection in the industry.

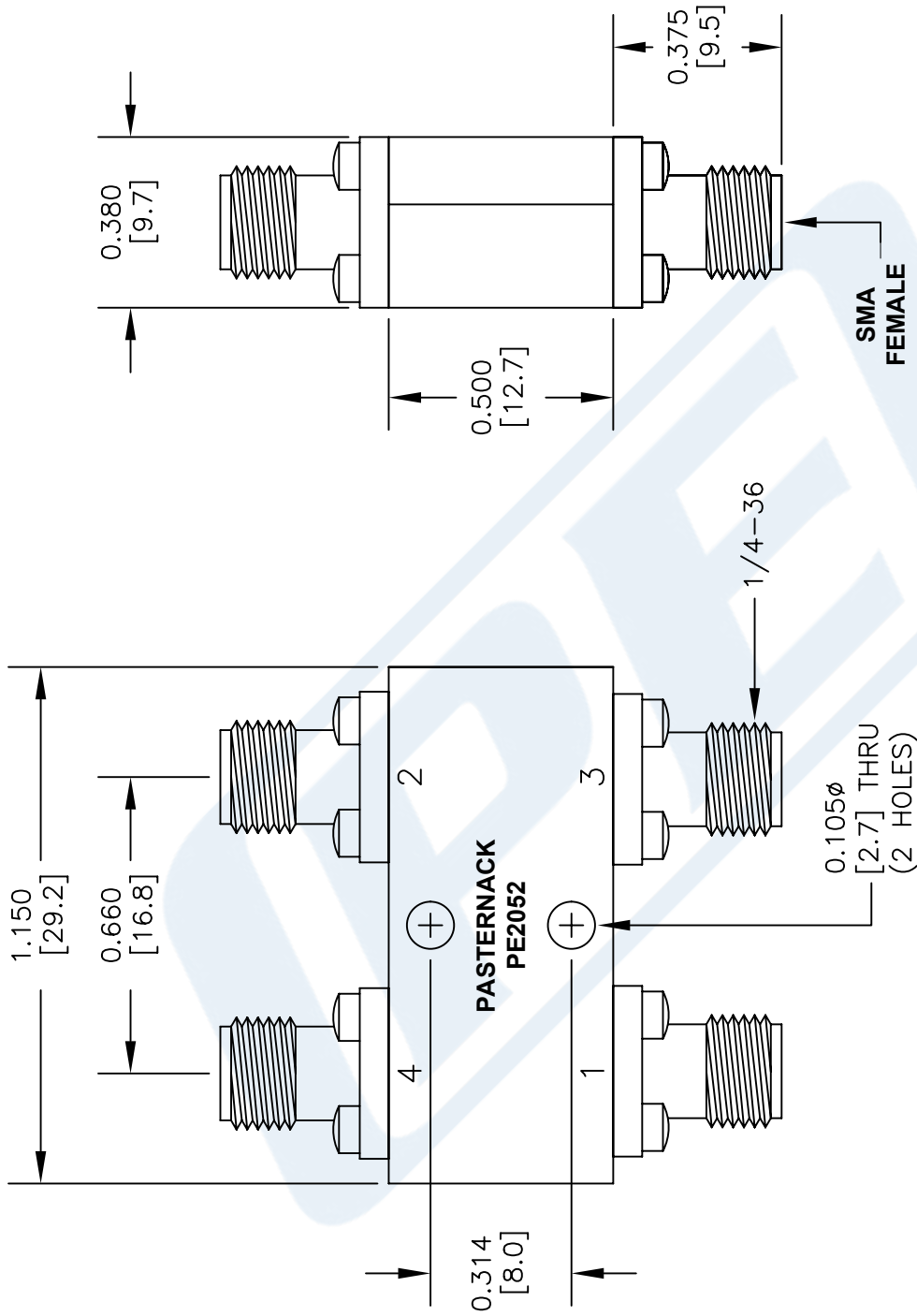
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 Degree SMA Hybrid Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2052](http://www.pasternack.com/hybrid-directional-3-db-sma-coupler-2-4-ghz-50-watts-pe2052-p.aspx)

URL: <http://www.pasternack.com/hybrid-directional-3-db-sma-coupler-2-4-ghz-50-watts-pe2052-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.

PE2052 CAD Drawing

90 Degree SMA Hybrid Coupler From 2 GHz to 4 GHz Rated to 50 Watts



PORT CONFIGURATION			
INPUT	90°	OUTPUT	ISOLATED
1	4	2	3

DWG TITLE

PE2052

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].

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CAD FILE 040116

SCALE N/A

SIZE A

3045