



## 90 Degree SMA Hybrid Coupler From 7.5 GHz to 16 GHz Rated to 100 Watts

### Hybrids Technical Data Sheet

PE2056A

#### Features

- High Power 90° Hybrid Coupler
- 7.5 to 16 GHz Frequency Range
- Isolation 15 dB
- Max Power 100 Watts (CW)

#### Applications

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

#### Description

The PE2056A is a high power 90 degree hybrid coupler that operates from 7.5 to 16 GHz and can handle up to 100 Watts (CW) with 15 dB isolation and 1.4:1 VSWR maximum. The package interface uses SMA female connectors, and is REACH and RoHS compliant.

The PE2056A 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	7.5		16	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Coupling		3.6 ±0.8		dB
Isolation		15		dB
VSWR			1.4:1	
Amplitude Balance			±1.4	dB
Phase Balance			±8	Degrees
Input Power (CW)			100	Watts
Input Power (Peak)			2	KWatts

#### Mechanical Specifications

##### Size

Length	1 in [25.4 mm]
Width	1.33 in [33.78 mm]
Height	0.38 in [9.65 mm]
Weight	0.047 lbs [21.32 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 7.5 GHz to 16 GHz Rated to 100 Watts PE2056A](#)



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#### Environmental Specifications

##### Temperature

Operating Range

-25 to +80 deg C

Storage Range

-55 to +150 deg C

Humidity

MIL-STD-202, Method 106 (90% relative humidity, +65°C)

Shock

MIL-STD-202, Method 213/I (100 G's, 6 ms)

Vibration

MIL-STD-202, Method 204/D (10 to 2,000 Hz, 20 G's, 12 hours)

Altitude

MIL-STD-202, Method 105/E (150,000 feet)

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

#### Plotted and Other Data

Notes:

90 Degree SMA Hybrid Coupler From 7.5 GHz to 16 GHz Rated to 100 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.

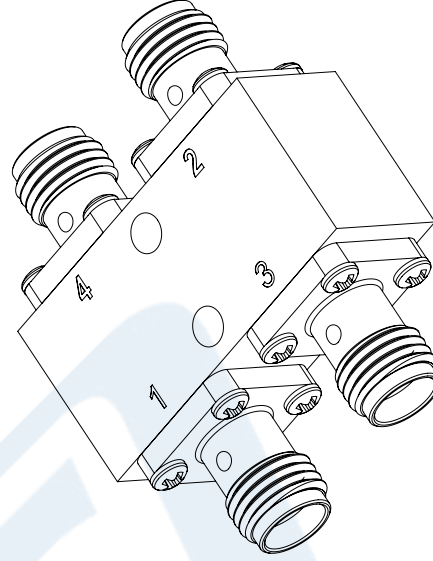
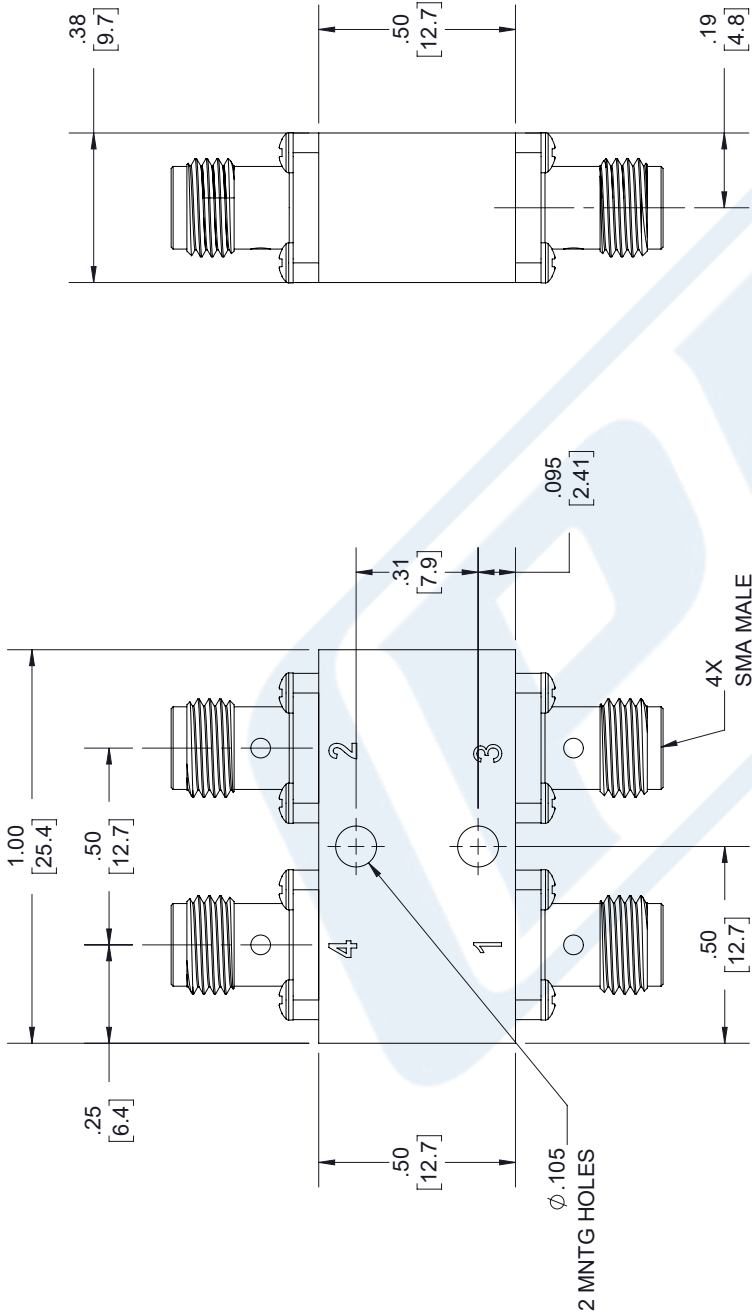
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URL: <https://www.pasternack.com/sma-coupler-16-ghz-pe2056a-p.aspx>

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.

# PE2056A CAD Drawing

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## PORT CONFIGURATION

- INPUT: 1
- 90° OUTPUT: 4
- 0° OUTPUT: 2
- ISOLATED: 3

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.02
.XXX	±0.010

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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DWG TITLE

PE2056A

CAGE CODE 53919

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].

CAD FILE 010918

SCALE N/A

SIZE A

7361