



90 Degree SMA Hybrid Coupler From 7 GHz to 18 GHz Rated to 30 Watts

Hybrids Technical Data Sheet

PE2CP1022

Features

- 18 dB Isolation
- 7 GHz to 18 GHz Frequency Range
- Painted Body
- Field Replaceable SMA Female
- Meets MIL-STD-202F for Humidity, Shock, Vibration, Altitude, and Temperature Cycle

Applications

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

Description

The PE2CP1022 is a 90° Hybrid Coupler that operates from 7 GHz to 18 GHz and can handle 30 watts of power with 18 dB isolation. The package is connectoized with field replaceable female SMA's and meets Military standard 202F for humidity, shock, vibration altitude, and temperature cycle. This coupler is a small unit that can handle a peak in power up to 1,000 Watts. This quadrature hybrid is an excellent option for any situation; to either equally split an input signal into two paths with a 90 degree phase shift between them or to combine two signals while maintaining high isolation between them.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	7		18	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Insertion Loss			1.3	dB
Isolation	18			dB
VSWR			1.4:1	
Amplitude Balance			±0.5	dB
Phase Balance		±5		Degrees
Input Power (CW)			30	Watts
Input Power (Peak)			1	KWatts

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 GHz to 18 GHz Rated to 30 Watts PE2CP1022](#)



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Mechanical Specifications

Size

Length	0.79 in [20.07 mm]
Width	1.22 in [30.99 mm]
Height	0.43 in [10.92 mm]
Weight	0.082 lbs [37.19 g]

Configuration

RF Connector Type	SMA Female
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Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

Humidity

Shock

Vibration

Altitude

Temperature Cycling

MIL-STD-202F METHOD 103B COND. B
MIL-STD-202F METHOD 213B COND. B
MIL-STD-202F METHOD 204D COND. B
MIL-STD-202F METHOD 105C COND. B
MIL-STD-202F METHOD 107D COND. A

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

Plotted and Other Data

Notes:

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 GHz to 18 GHz Rated to 30 Watts PE2CP1022](#)

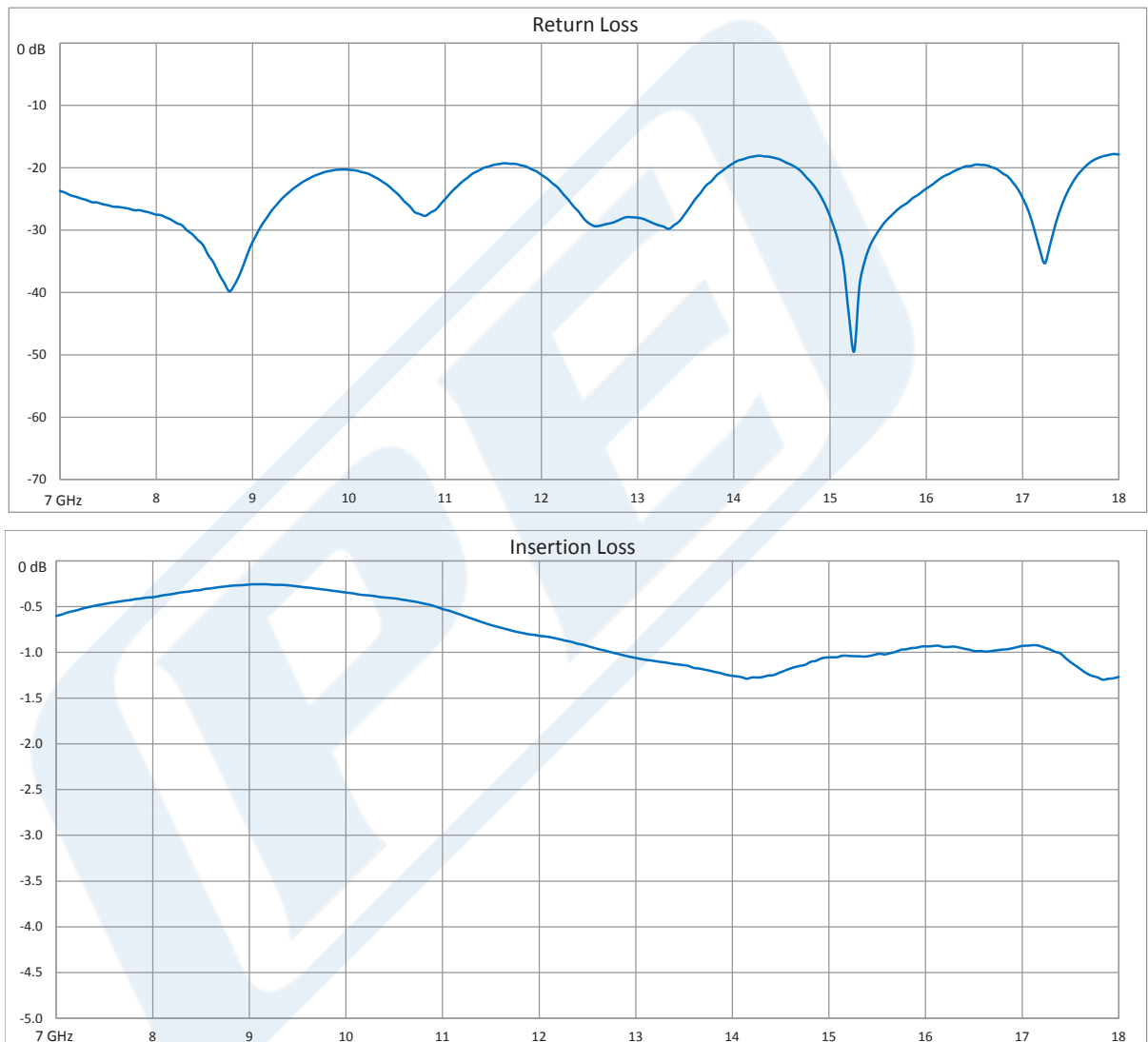


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Typical Performance Data



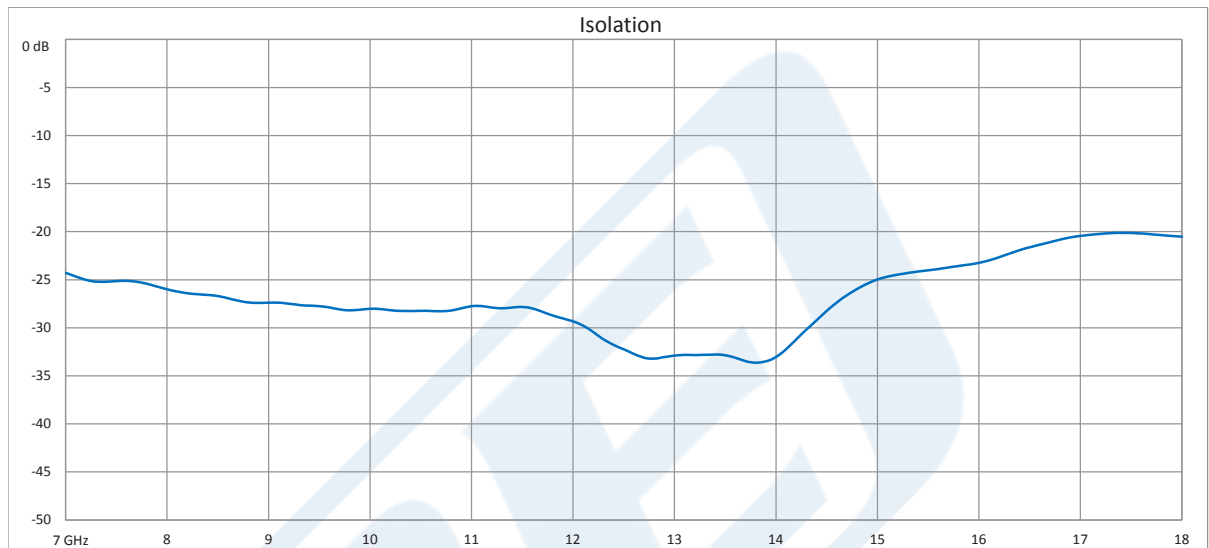
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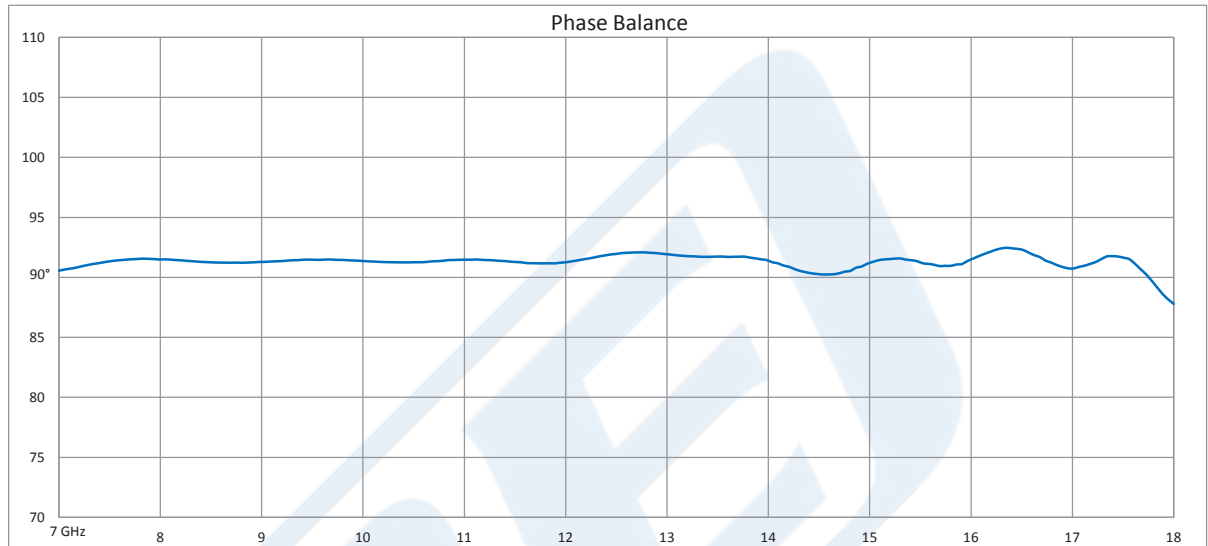
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90 Degree SMA Hybrid Coupler From 7 GHz to 18 GHz Rated to 30 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

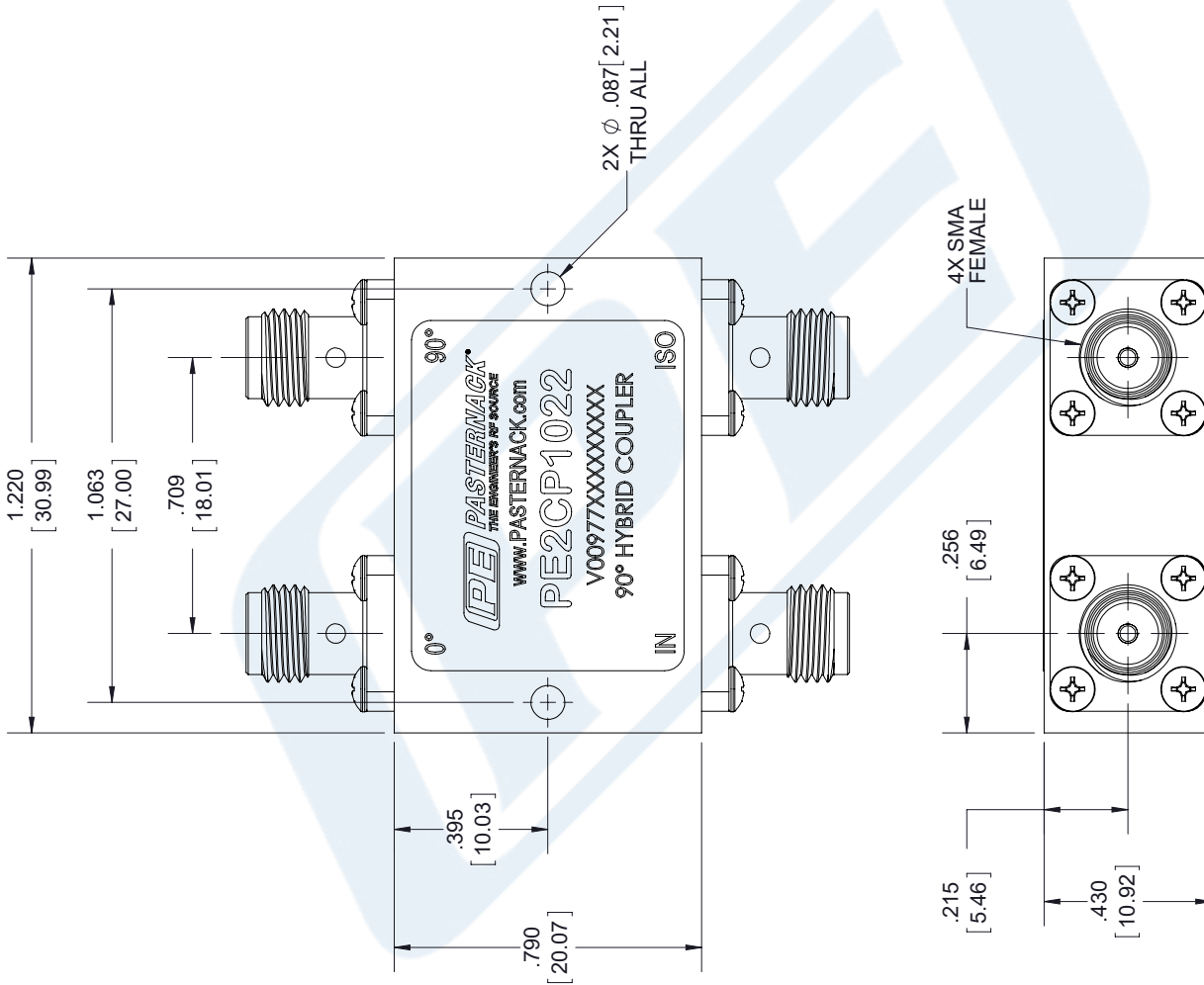
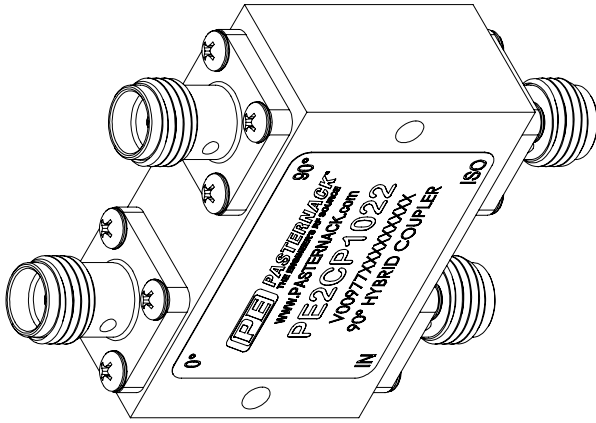
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 Degree SMA Hybrid Coupler From 7 GHz to 18 GHz Rated to 30 Watts PE2CP1022](https://www.pasternack.com/sma-coupler-18-ghz-pe2cp1022-p.aspx)

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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.

PE2CP1022 CAD Drawing

90 Degree SMA Hybrid Coupler From 7 GHz to 18 GHz Rated to 30 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

PE2CP1022

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 092217

SCALE N/A

SIZE A

7361