



180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts

Hybrids Technical Data Sheet

PE2CP1161

Features

- 180° Phase Shift Between Output Ports
- High power handling of 20 Watts CW
- 26.5 to 40 GHz Frequency Range
- VSWR 1.5:1 Typical
- High Isolation of 15 dB Minimum
- Low 1.8 dB Insertion Loss Typical
- 2.92mm Female Connectors
- Stable performance over Operating Temperature Range

Applications

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

Description

The PE2CP1161 is a high power 180 degree hybrid coupler that operates from 26.5 to 40 GHz and can handle 15 Watts (CW) with 15 dB isolation minimum and 1.6:1 VSWR maximum. The package interface uses 2.92mm Female connectors.

The PE2CP1161 is part of Pasternack's family of 180 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 180 degree difference in phase.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	26.5		40	GHz
Impedance		50		Ohms
Phase Difference		180		Degrees
Coupling		3		dB
Insertion Loss		1.8	2.5	dB
Isolation	15	18		dB
VSWR		1.5:1	1.6:1	
Amplitude Balance		±0.7	±1	dB
Phase Balance		8	12	Degrees
Input Power (CW)			20	Watts
Input Power (Peak)			300	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts PE2CP1161](#)



180 Degree 2.92mm Hybrid Coupler from
26.5 GHz to 40 GHz Rated to 20 Watts

Hybrids Technical Data Sheet

PE2CP1161

Mechanical Specifications

Size

Length	1.17 in [29.72 mm]
Width	0.95 in [24.13 mm]
Height	0.43 in [10.92 mm]
Weight	0.07155 lbs [32.45 g]

Configuration

RF Connector Type	2.92mm Female
-------------------	---------------

Environmental Specifications

Temperature

Operating Range	-45 to +85 deg C
Storage Range	-55 to +125 deg C

Humidity

100% RH at 35°C, 95% RH at 40°C

Shock

20G for 11msec half sine wave, 3 axis both directions

Vibration

25gRMS (15 degrees 2KHz) endurance, 1 hour per axis

Altitude

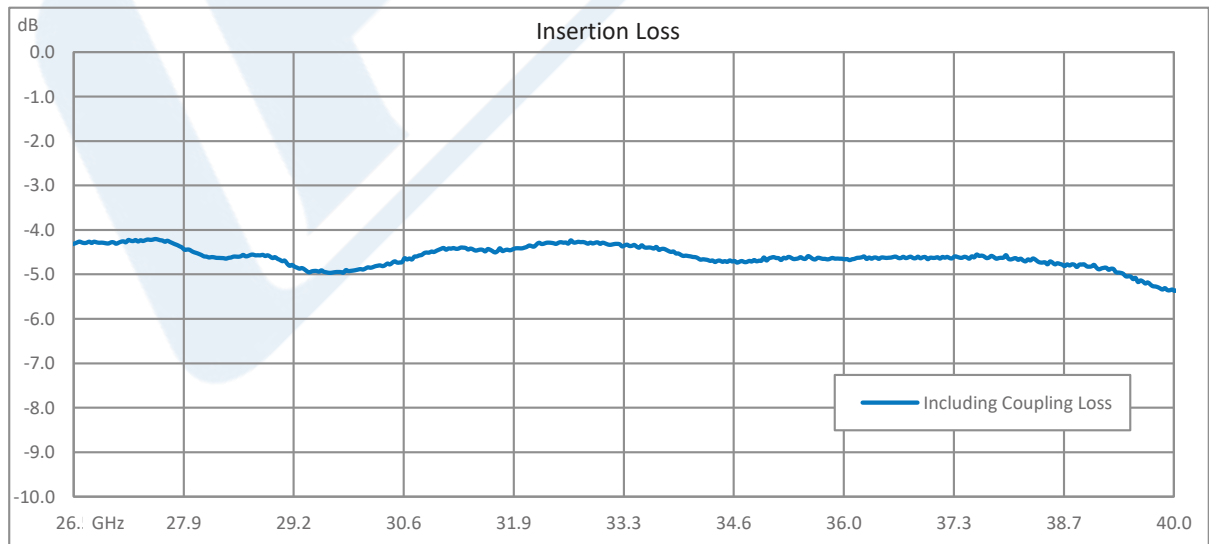
30,000 ft.

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

Plotted and Other Data

Notes:

Typical Performance Data



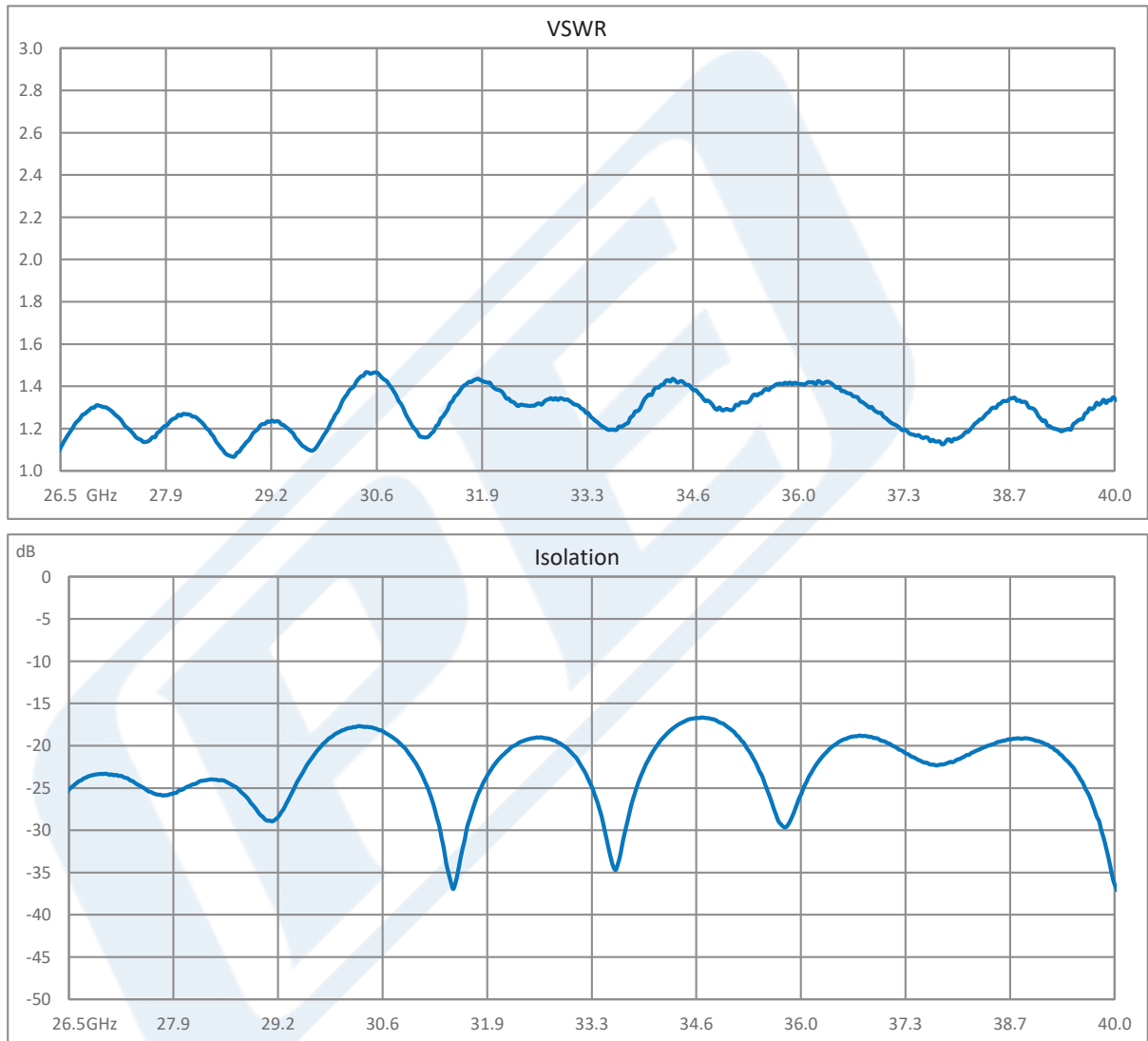
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts PE2CP1161](#)



180 Degree 2.92mm Hybrid Coupler from
26.5 GHz to 40 GHz Rated to 20 Watts

Hybrids Technical Data Sheet

PE2CP1161



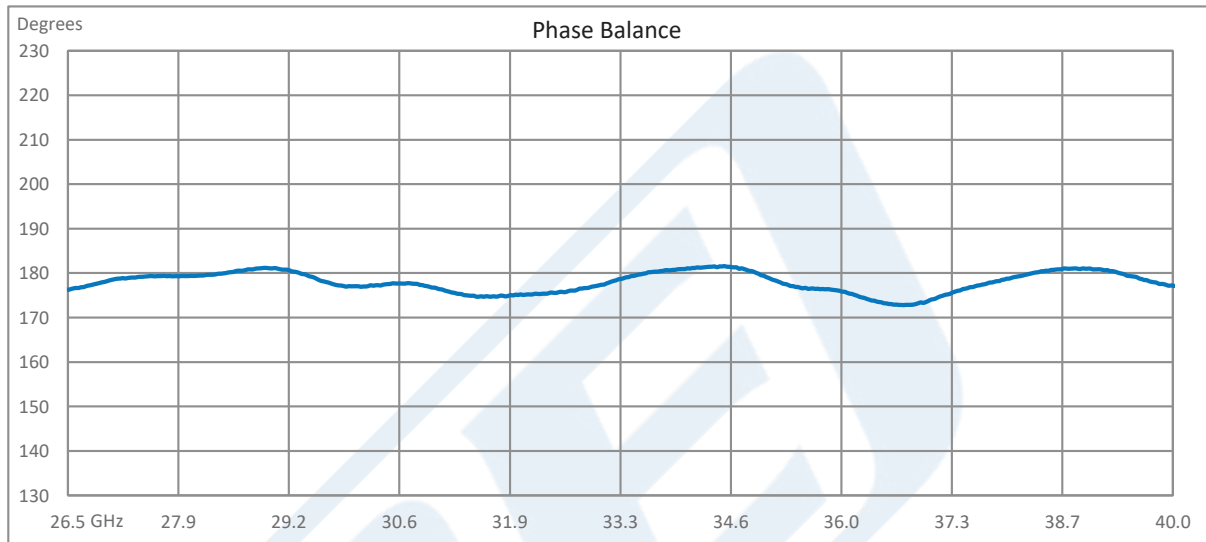
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts PE2CP1161](#)



180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts

Hybrids Technical Data Sheet

PE2CP1161



180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 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: [180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts PE2CP1161](#)

URL: <https://www.pasternack.com/2.92mm-coupler-40-ghz-pe2cp1161-p.aspx>

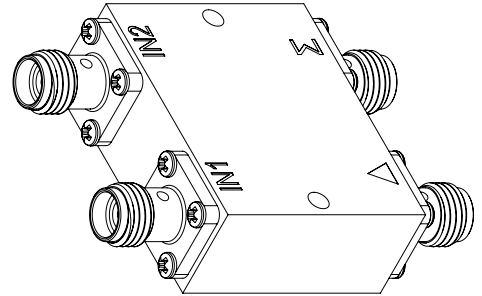
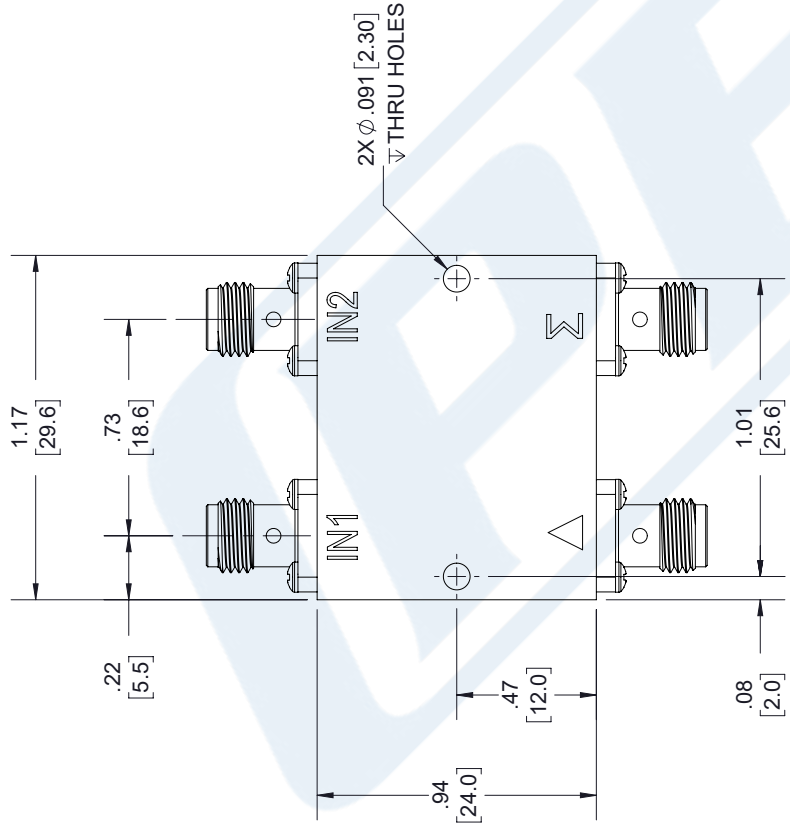
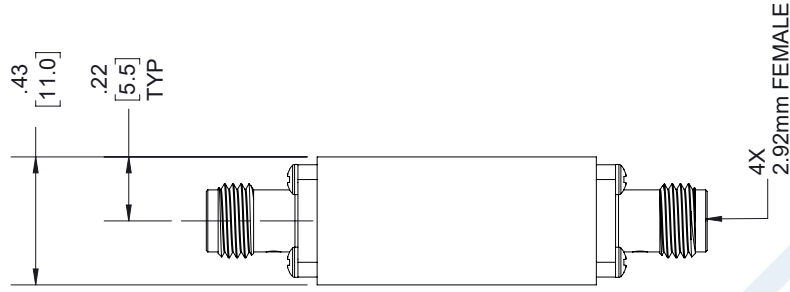
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE2CP1161 CAD Drawing

180 Degree 2.92mm Hybrid Coupler from 26.5 GHz to 40 GHz Rated to 20 Watts

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/3/2020	S.PONG

REVISIONS



PASTERNAK
PE2CP1161
D/C: YYWW

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 INFINITO 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

THIRD-ANGLE PROJECTION

THE INFORMATION AND
DESIGN IN THIS DOCUMENT
IS THE PROPERTY OF
PASTERNAK CORPORATION
ALL RIGHTS RESERVED.

SHEET 1 OF 1
SCALE N/A

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.