



Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts

Couplers Technical Data Sheet

PE2CP1125-20

Features

- 8 GHz to 40 GHz
- 30 Watts CW Max Power
- 20 dB Coupling Value
- Directional 2.92mm Coupler
- Meets Standards for Humidity, Shock, Vibration, Altitude

Applications

- Communications Systems
- GSM, LTE, 5G
- Amplifier Systems
- Point-to-Point Radio
- Automotive Radar
- Defense Applications
- Wireless Telecommunications

Description

The PE2CP1125-20 is an 20 dB RF coupler with 50 ohm 2.92mm connectors operating from 8 GHz to 40 GHz with a maximum input power of 20 Watts CW, and peak power handling of 500 watt. The PE2CP1125-20 has a coupling factor of 20 dB, insertion loss of 1 dB maximum and a maximum VSWR of 1.6:1. The coupler operates over a temperature range of -45 to 85° C and meets environmental standard for humidity, shock, vibration, and altitude. Couplers have many Applications and perform several functions within the RF/Microwave industry such as circuit feedback and signal sampling for measurement or monitoring.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------------|---------|---------|---------|-------|
| Frequency Range | 8 | | 40 | GHz |
| Impedance | | 50 | | Ohms |
| Coupling | 19 | 20 | 21 | dB |
| Frequency Sensitivity | | ±0.5 | ±0.7 | dB |
| Insertion Loss | | 0.9 | 1 | dB |
| Main Line VSWR | | 1.45:1 | 1.6:1 | |
| Secondary Line VSWR | | 1.4:1 | 1.6:1 | |
| Input Power (CW) | | | 30 | Watts |
| Input Power (Peak) | | | 500 | Watts |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts PE2CP1125-20](#)



Directional 20 dB 2.92mm Coupler From
8 GHz to 40 GHz Rated to 30 Watts

Couplers Technical Data Sheet

PE2CP1125-20

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|--------------------------|-----------|------------|----|----|----|-------|
| Frequency Range | 8 to 26.5 | 26.5 to 40 | | | | GHz |
| Insertion Loss, Typ | 0.7 | 0.9 | | | | dB |
| Main Line VSWR, Typ | 1.3:1 | 1.45:1 | | | | |
| Main Line VSWR, Max | 1.5:1 | 1.6:1 | | | | |
| Secondary Line VSWR, Typ | 1.31:1 | 1.4:1 | | | | |
| Secondary Line VSWR, Max | 1.5:1 | 1.6:1 | | | | |
| Directivity, Min | 12 | 10 | | | | dB |
| Directivity, Typ | 15 | 14 | | | | dB |

Mechanical Specifications

Weight 0.058 lbs [26.31 g]
Housing Material and Plating Aluminum

Configuration

Package Type Connectorized
Input Connector 2.92mm Female
Output Connector 2.92mm Female
Coupled Connectors 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 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude 30,000 ft. (Epoxy Sealed Controlled environment)

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: [Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts PE2CP1125-20](#)

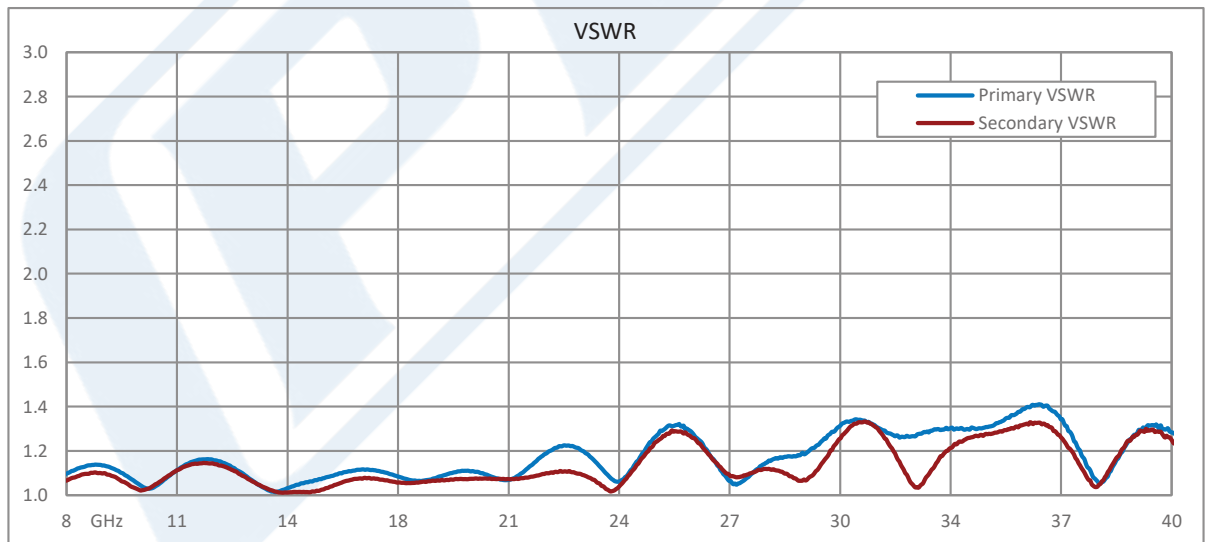
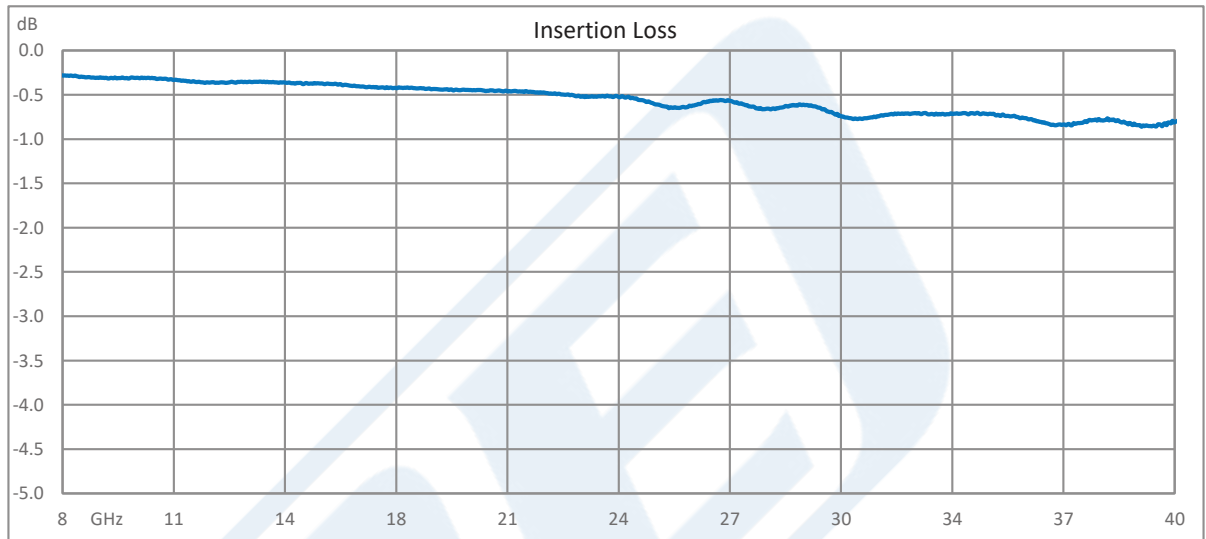


Directional 20 dB 2.92mm Coupler From
8 GHz to 40 GHz Rated to 30 Watts

Couplers Technical Data Sheet

PE2CP1125-20

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: [Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts PE2CP1125-20](#)



Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts

Couplers Technical Data Sheet

PE2CP1125-20

Directional 20 dB 2.92mm Coupler From 8 GHz to 40 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: [Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts PE2CP1125-20](https://www.pasternack.com/directional-20-db-2.92mm-coupler-40-ghz-pe2cp1125-20-p.aspx)

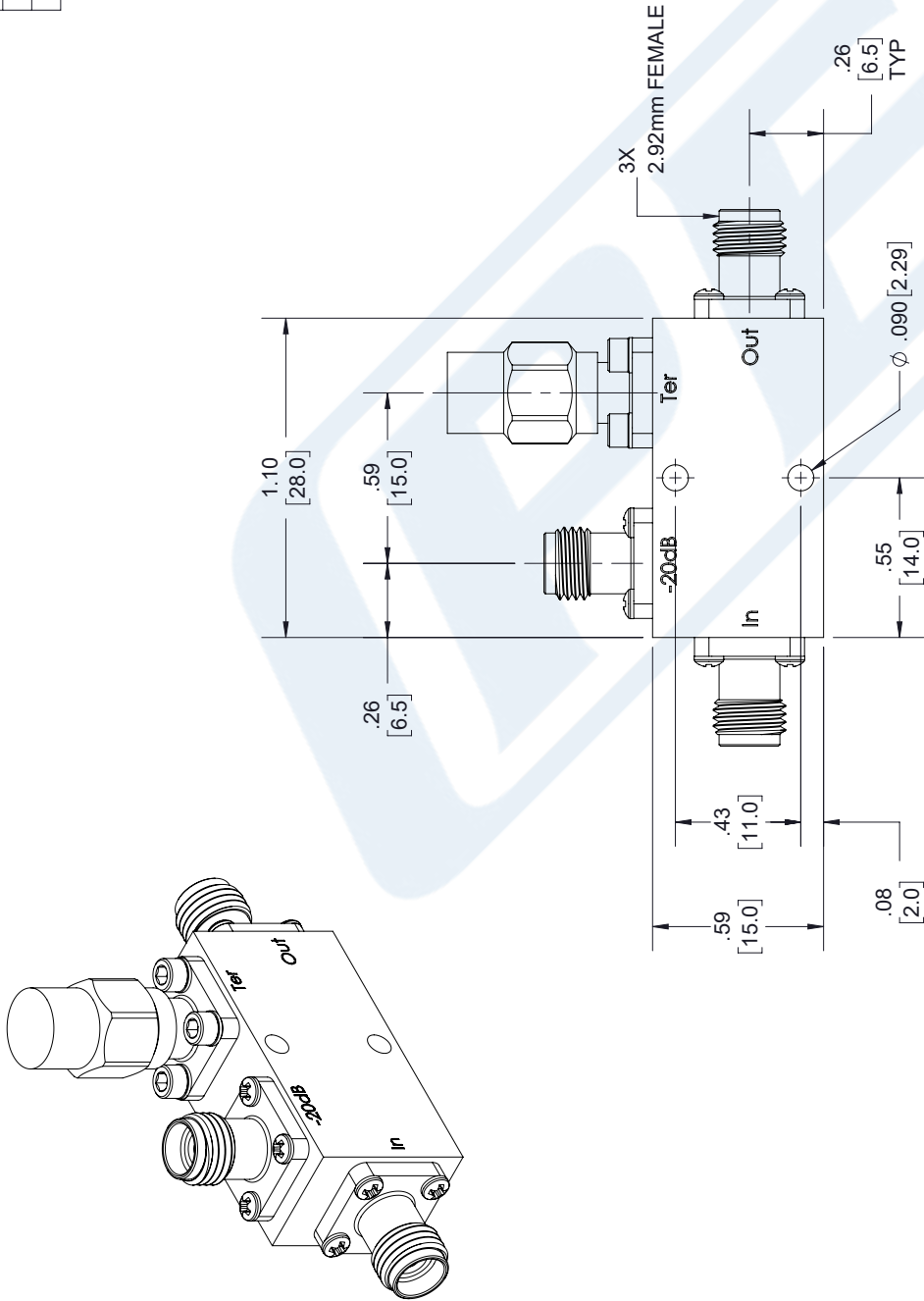
URL: <https://www.pasternack.com/directional-20-db-2.92mm-coupler-40-ghz-pe2cp1125-20-p.aspx>

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.

PE2CP1125-20 CAD Drawing

Directional 20 dB 2.92mm Coupler From 8 GHz to 40 GHz Rated to 30 Watts

| REVISIONS | | | |
|-----------|------------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | PCR PE2CP1125-20 | 8/11/2021 | S. PONG |



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

REV B

ITEM NO. PE2CP1125-20

DRAWN BY K. DANG

SALES@PASTERNAK.COM

1.949.261.7451

WWW.PASTERNAK.COM

PASTERNAK ENTERPRISES, INC.

P.O. BOX 16759, IRVINE, CA 92623.

PHONE: 1.949.261.1920 | 1.866.727.8376

FAX: 1.949.261.7451

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%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

PASTERNAK
PE2CP1125-20
D/C: YYWW

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.