



# Features • 8 GHz to 43.5 GHz • Directional 2.92mm Coupler • 30 Watts CW Max Power • Directional 2.92mm Coupler • 15 dB Coupling Value • Meets Standards for Humidity, Shock, Vibration, Altitude

- Communications Systems
- Communications System
  GSM, LTE, 5G
- Amplifier Systems

Point-to-Point RadioAutomotive Radar

Defense Applications

Wireless Telecommunications

#### Description

The PE2CP1125-15 is an 15 dB RF coupler with 50 ohm 2.92mm connectors operating from 8 GHz to 43.5 GHz with a maximum input power of 30 Watts CW, and peak power handling of 500 watt. The PE2CP1125-15 has a coupling factor of 15 dB, insertion loss of 1.5 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       |         | 43.5    | GHz   |
| Impedance             |         | 50      |         | Ohms  |
| Coupling              | 14      | 15      | 16      | dB    |
| Frequency Sensitivity |         | ±0.3    | ±0.7    | dB    |
| Insertion Loss        |         | 1.1     | 1.5     | dB    |
| Main Line VSWR        |         | 1.4:1   | 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 15 dB 2.92mm Coupler From 8 GHz to 43.5 GHz Rated to 30 Watts PE2CP1125-15

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451 Sales@Pasternack.com • Techsupport@Pasternack.com



# **Couplers Technical Data Sheet**

# PE2CP1125-15

#### Performance by Frequency

| Description                | F1      | F2       | F3         | F4 | F5 | Units |
|----------------------------|---------|----------|------------|----|----|-------|
| Frequency Range            | 8 to 20 | 20 to 40 | 40 to 43.5 |    |    | GHz   |
| Insertion Loss, Typ        | 0.7     | 1.1      | 1.3        |    |    | dB    |
| Main Line VSWR, Typ        | 1.3:1   | 1.4:1    | 1.5:1      |    |    |       |
| Main Line VSWR, Max        | 1.5:1   | 1.6:1    |            |    |    |       |
| Secondary Line VSWR, Typ   | 1.3:1   | 1.4:1    | 1.5:1      |    |    |       |
| Secondary Line VSWR, Max   | 1.5:1   | 1.6:1    |            |    |    |       |
| Directivity, Min           | 14      | 10       | 12         |    |    | dB    |
| Directivity, Typ           | 18      | 14       |            |    |    | dB    |
| Coupling, Typ              | 15      | 15       | 15         |    |    | dB    |
| Frequency Sensitivity, Typ | ±0.4    | ±0.3     | ±0.3       |    |    | dB    |

#### Mechanical Specifications

Weight Housing Material and Plating

#### Configuration

Package Type Input Connector Output Connector Coupled Connectors

### **Environmental Specifications**

**Temperature** Operating Range Storage Range

Humidity Shock Vibration Altitude 0.058 lbs [26.31 g] Aluminum

Connectorized 2.92mm Female 2.92mm Female 2.92mm Female

-45 to +85 deg C -55 to +125 deg C

100% RH at 35°C, 95% RH at 40°C 20G for 11msec half sine wave, 3 axis both directions 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis 30,000 ft. (Epoxy Sealed Controlled environment)

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

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## PE2CP1125-15

Directional 15 dB 2.92mm Coupler From 8 GHz to 43.5 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 15 dB 2.92mm Coupler From 8 GHz to 43.5 GHz Rated to 30 Watts PE2CP1125-15

URL: https://www.pasternack.com/directional-15-db-2.92mm-coupler-43.5-ghz-pe2cp1125-15-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.

# PE2CP1125-15 CAD Drawing

Directional 15 dB 2.92mm Coupler From 8 GHz to 43.5 GHz Rated to 30 Watts



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