



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

Couplers Technical Data Sheet

PE2CP1125-15

Features

- 8 GHz to 43.5 GHz
- 30 Watts CW Max Power
- 15 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 PE2CP1125-15 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](#)

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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 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:

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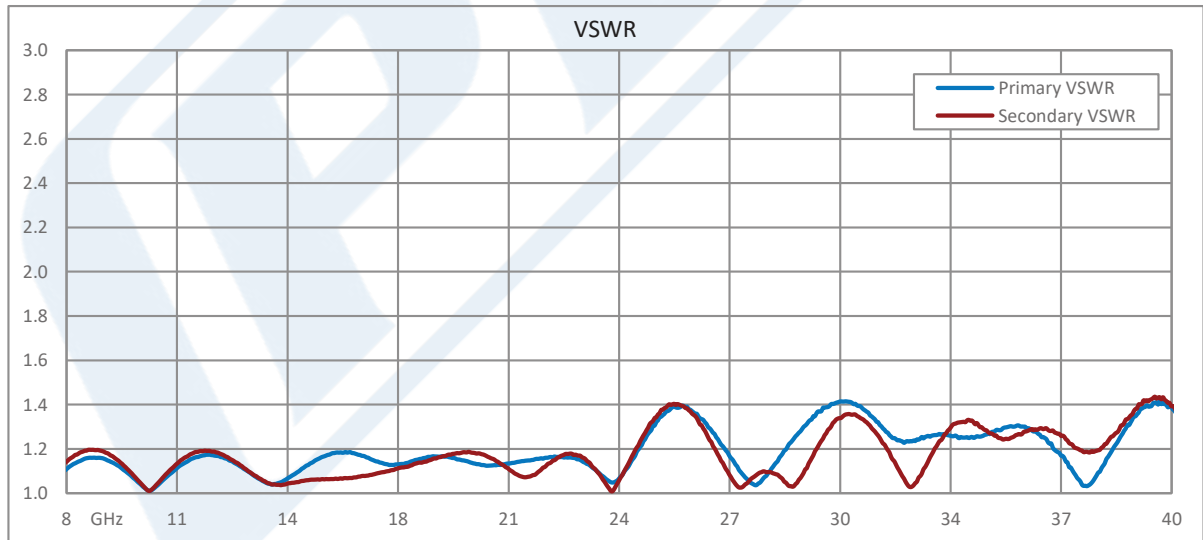
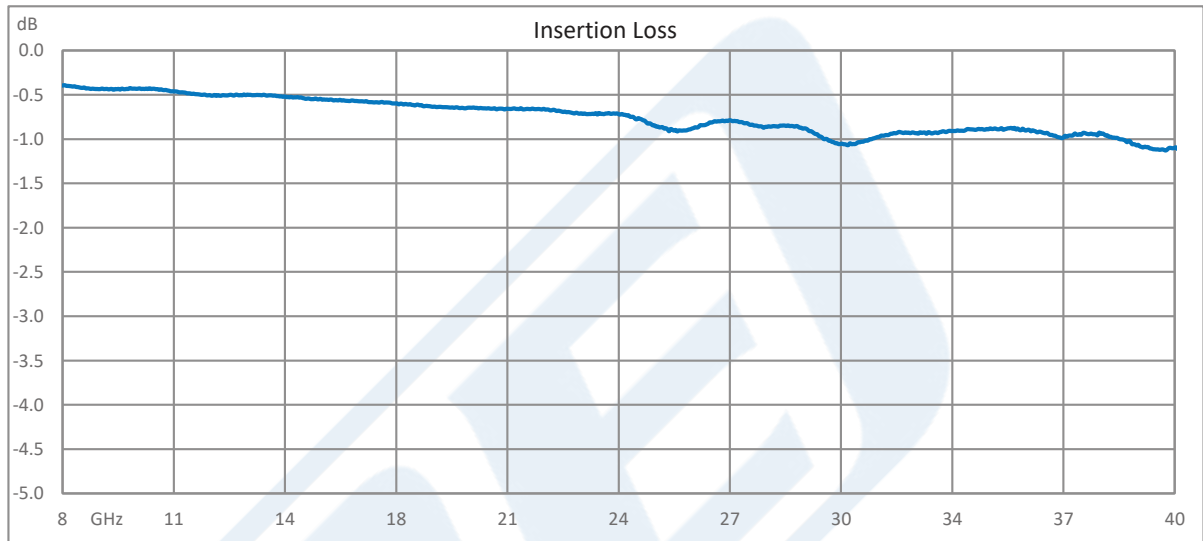
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Typical Performance Data



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

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

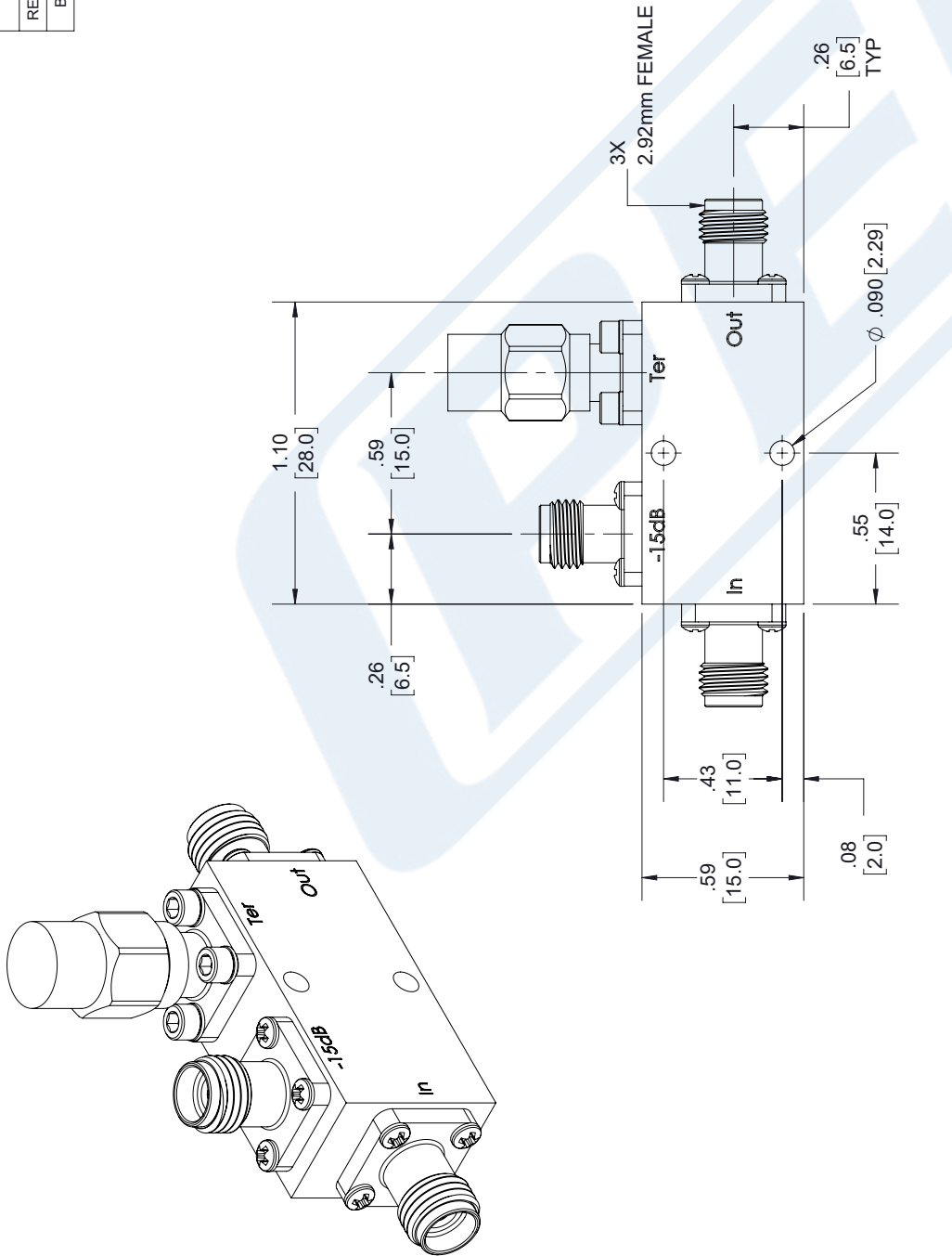
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PE2CP1125-15 CAD Drawing

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

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE2CP1125-15	8/11/2021	S. PONG



UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS
 .XX = ±.02 [.51] ±.1/32
 .XXX = ±.005 [.13] ANGLES ± 1°
 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.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A

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LABEL

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