



Directional 10 dB SMA Coupler From 800 MHz
to 2.5 GHz Rated to 50 Watts

Couplers Technical Data Sheet

PE2CP1025-10

Features

- 0.8 to 2.5 GHz
- 50 Watts CW Max Power
- 10 dB Coupling Value
- Directional SMA Coupler
- Meets MIL-STD-202F for Humidity, Shock, Vibration, Altitude, Temperature Cycle

Applications

- Communications Systems
- CDMA, GSM, LTE
- Amplifier Systems
- Amplifier Power Dividing
- Aviation/Aerospace
- Defense Applications
- Wireless Telecommunications

Description

The PE2CP1025-10 is a 10 dB RF coupler with 50 ohm SMA connectors operating from 0.8 to 2.5 GHz with a maximum input power of 50 Watts CW, and peak power handling of 1 kilowatt. The PE2CP1025-10 has a coupling factor of 10 dB, insertion loss of 0.5 (excluding coupled power) and a maximum VSWR of 1.20:1. The coupler operates over a temperature range of -55° to 125° C and meets military environmental standard for humidity, shock, vibration, altitude and temperature. 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	0.8		2.5	GHz
Impedance		50		Ohms
Coupling		10 ±1		dB
Frequency Sensitivity			±0.7	dB
Insertion Loss			0.5	dB
Directivity	20			dB
Main Line VSWR			1.2:1	
Input Power (CW)			50	Watts
Input Power (Peak) 0.2 µs 25%, 1 µs 5%			1	KWatts

Electrical Specification Notes:
Values at 25°C, sea level.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 10 dB SMA Coupler From 800 MHz to 2.5 GHz Rated to 50 Watts PE2CP1025-10](#)



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Mechanical Specifications

Size

Length	4.1 in [104.14 mm]
Width/Dia.	0.43 in [10.92 mm]
Height	0.99 in [25.15 mm]
Weight	0.134 lbs [60.78 g]

Configuration

Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

Environmental Specifications

Temperature

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

Humidity

Shock

Vibration

Altitude

Temperature Cycle

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:

- Values at 25°C, sea level.

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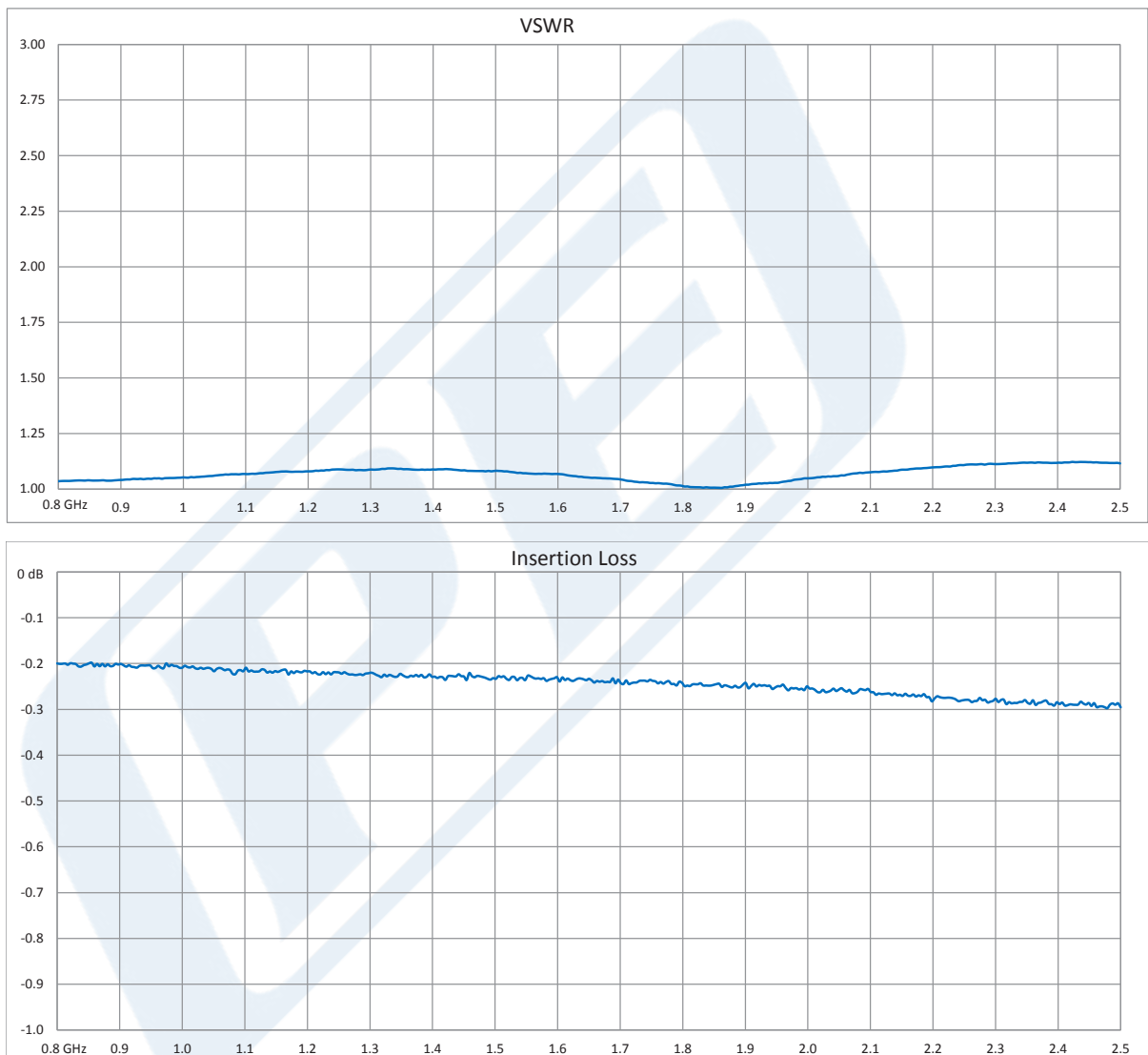


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Typical Performance Data



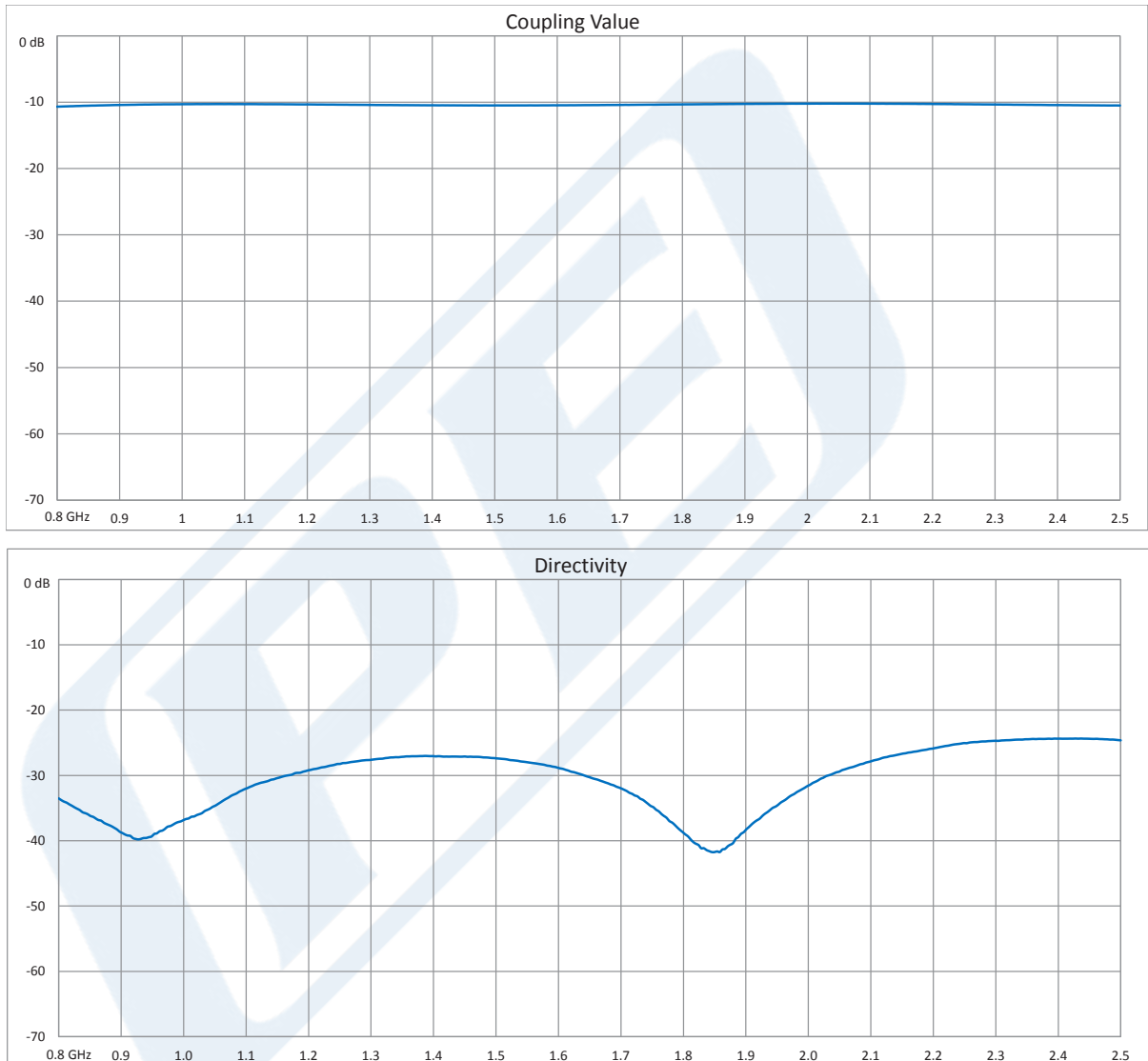
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Directional 10 dB SMA Coupler From 800 MHz to 2.5 GHz Rated to 50 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

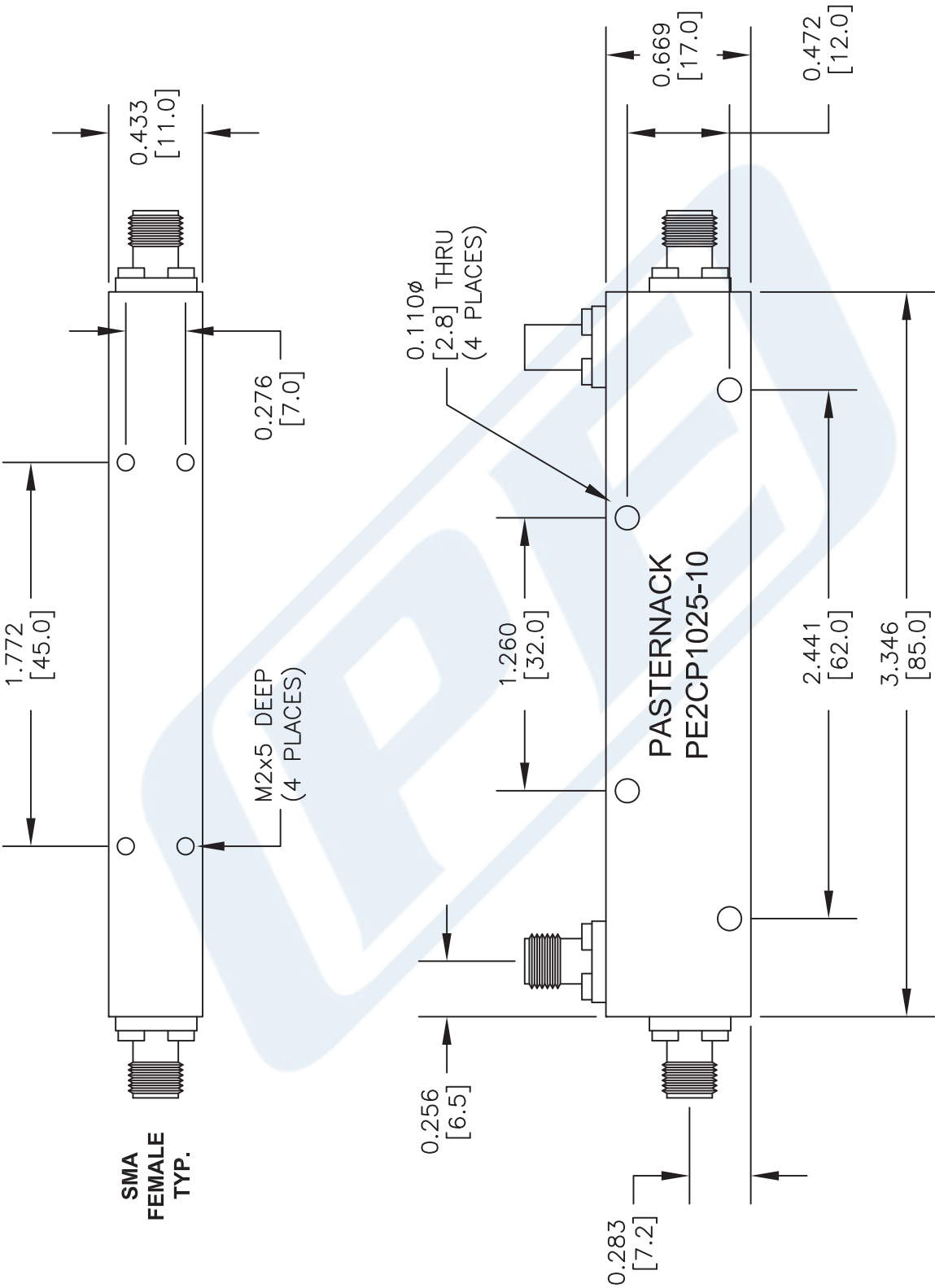
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 10 dB SMA Coupler From 800 MHz to 2.5 GHz Rated to 50 Watts PE2CP1025-10](https://www.pasternack.com/directional-10-db-sma-coupler-800-mhz-2.5-ghz-50-watts-pe2cp1025-10-p.aspx)

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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.

PE2CP1025-10 CAD Drawing

Directional 10 dB SMA Coupler From 800 MHz to 2.5 GHz Rated to 50 Watts



DWG TITLE

PE2CP1025-10

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].

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FSCM NO. 53919

CAD FILE 041315

SCALE N/A

SIZE A

2233