



## Directional 30 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts

### Couplers Technical Data Sheet

PE2CP1023-30

#### Features

- 0.8 to 2.5 GHz
- 60 Watts CW Max Power
- 30 dB Coupling Value
- Directional N 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 PE2CP1023-30 is an 30 dB RF coupler with 50 ohm N connectors operating from 0.8 to 2.5 GHz with a maximum input power of 60 Watts CW, and peak power handling of 1 kilowatt. The PE2CP1023-30 has a coupling factor of 1 dB, insertion loss of 0.4 (excluding coupled power) and a maximum VSWR of 1.25:1. 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		30 ±1		dB
Frequency Sensitivity			±0.7	dB
Insertion Loss			0.4	dB
Directivity	20			dB
Main Line VSWR			1.25:1	
Input Power (CW)			60	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 30 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts PE2CP1023-30](#)



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### Mechanical Specifications

#### Size

Length	5.635 in [143.13 mm]
Width/Dia.	0.825 in [20.96 mm]
Height	2.45 in [62.23 mm]
Weight	0.51 lbs [231.33 g]

#### Configuration

Input Connector	N Female
Output Connector	N Female
Coupled Connectors	N Female

### Environmental Specifications

#### Temperature

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

Humidity	MIL-STD-202F METHOD 103B COND. B
Shock	MIL-STD-202F METHOD 213B COND. B
Vibration	MIL-STD-202F METHOD 204D COND. B
Altitude	MIL-STD-202F METHOD 105C COND. B
Temperature Cycle	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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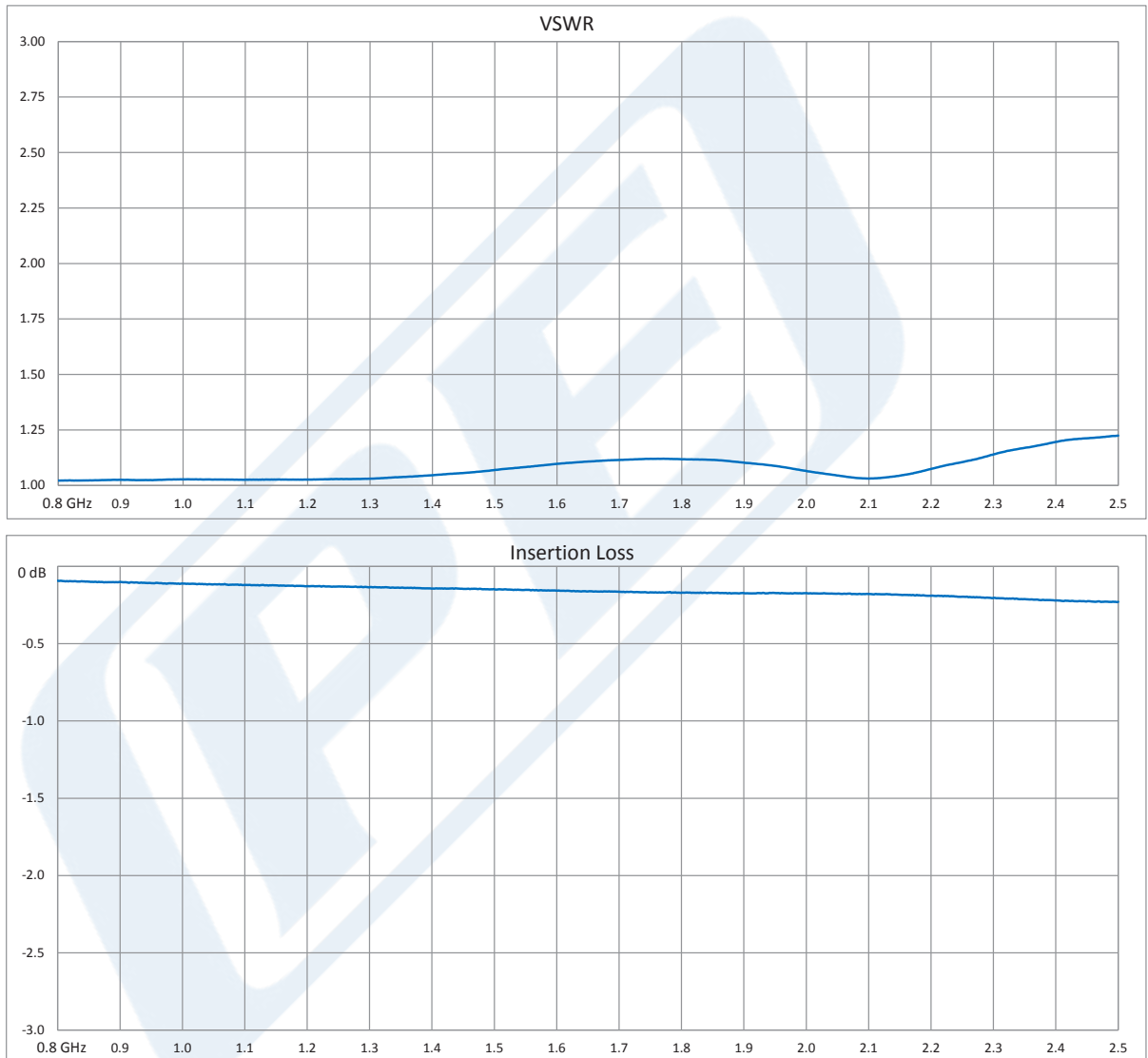


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Typical Performance Data



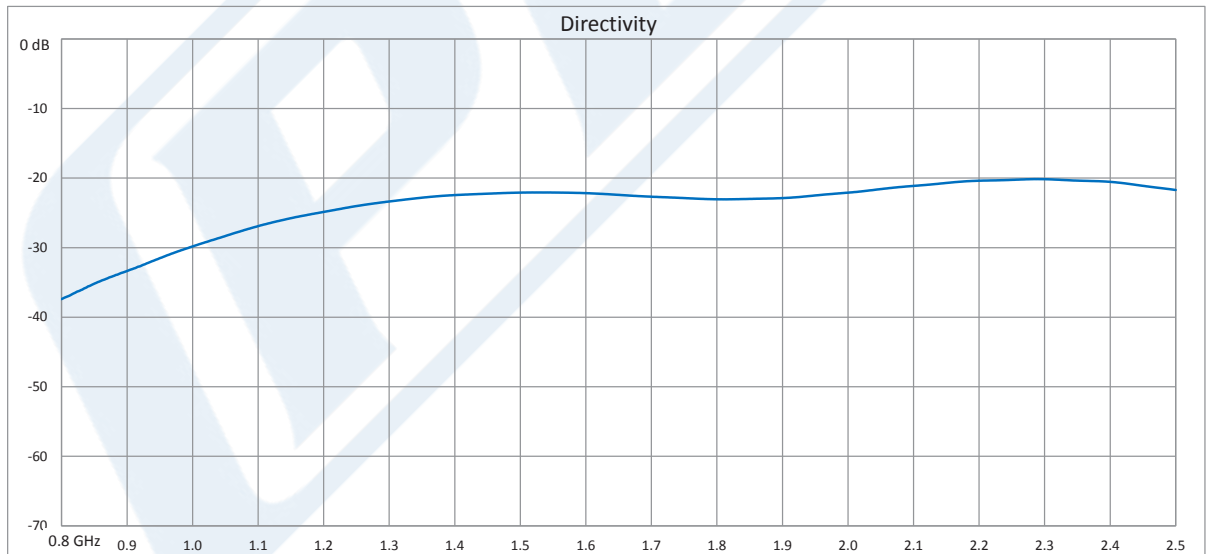
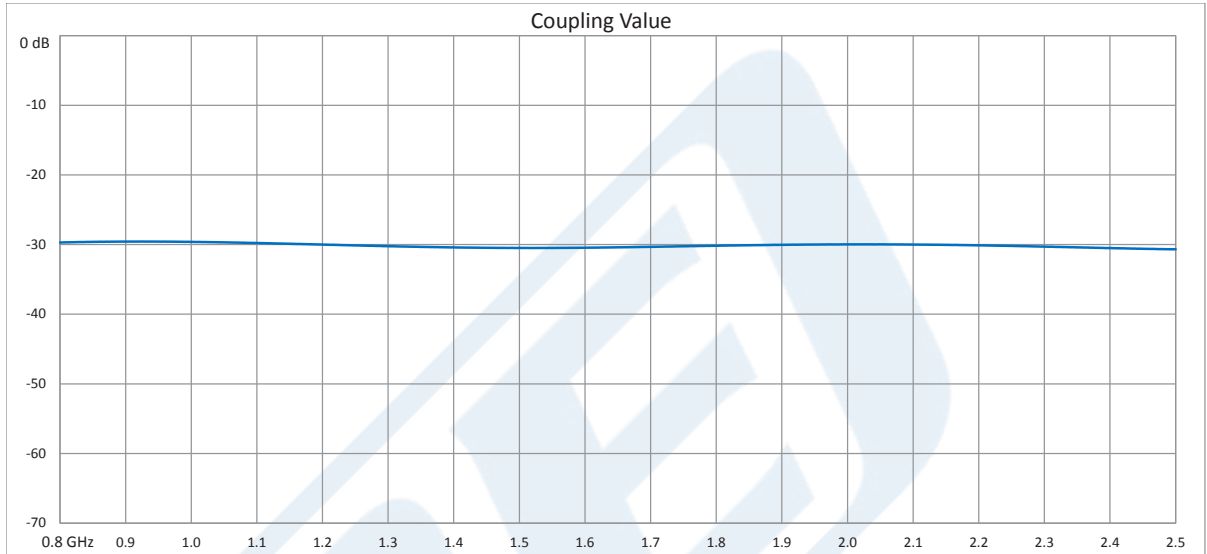
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Directional 30 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

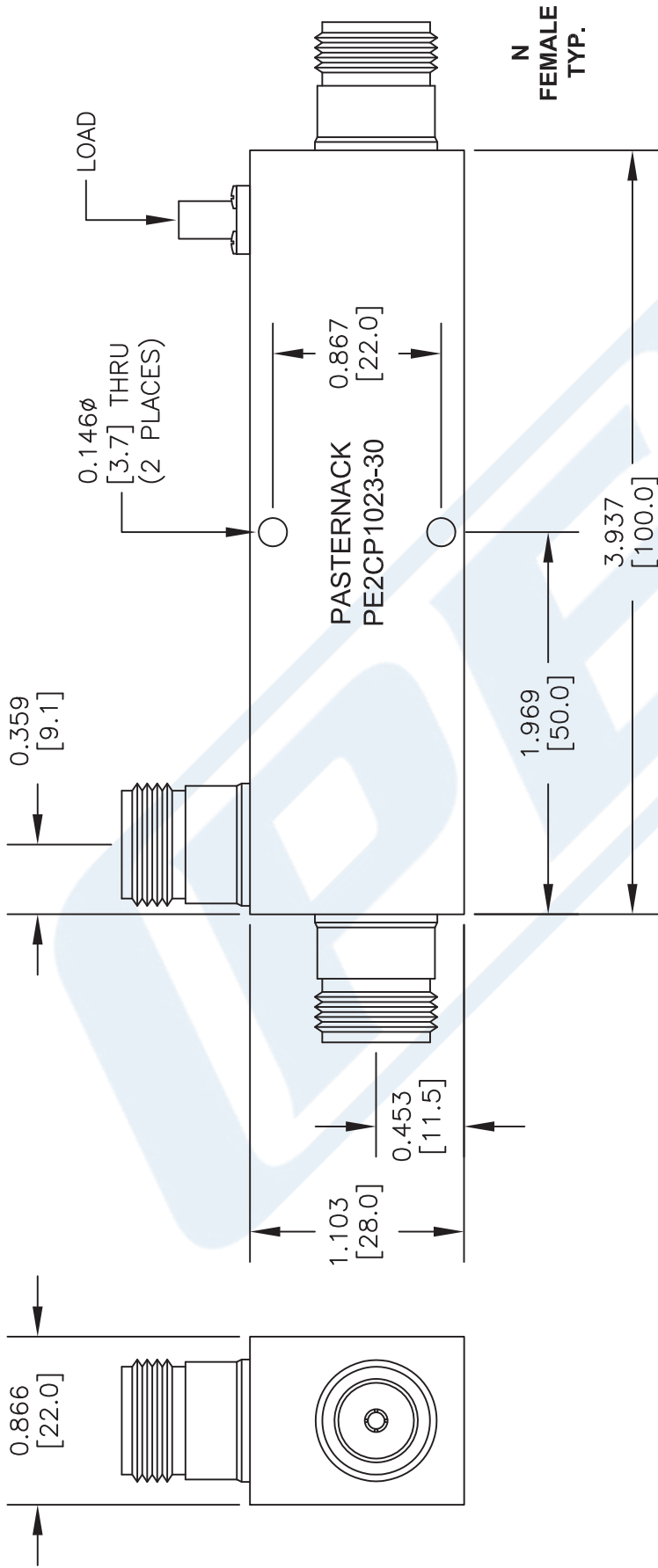
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 30 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts PE2CP1023-30](https://www.pasternack.com/directional-30-db-n-coupler-800-mhz-2.5-ghz-60-watts-pe2cp1023-30)

URL: <https://www.pasternack.com/directional-30-db-n-coupler-800-mhz-2.5-ghz-60-watts-pe2cp1023-30-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.

# PE2CP1023-30 CAD Drawing

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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].

DWG TITLE  
**PE2CP1023-30**

FSCM NO. 53919

SCALE N/A

SIZE A

CAD FILE 041315

2233

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