

Directional 20 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts



# Couplers Technical Data Sheet

# PE2CP1023-20

#### Features

- 0.8 to 2.5 GHz
- 60 Watts CW Max Power
- 20 dB Coupling Value

#### **Applications**

- Communications Systems
- CDMA, GSM, LTEAmplifier Systems

Altitude, Temperature Cycle

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Directional N Coupler

Amplifier Power DividingAviation/Aerospace

Defense Applications

Wireless Telecommunications

Meets MIL-STD-202F for Humidity, Shock, Vibration,

Description

The PE2CP1023-20 is an 20 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 PE2CP1023-20 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		20 ±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)			1	KWatts
0.2 µs 25%, 1 µs 5%				

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 20 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts PE2CP1023-20

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



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**Mechanical Specifications** 

**Size** Length Width/Dia. Height

Weight

**Configuration** Input Connector Output Connector Coupled Connectors

#### **Environmental Specifications**

**Temperature** Operating Range Storage Range

Humidity Shock Vibration Altitude Temperature Cycle 5.63 in [143 mm] 0.825 in [20.96 mm] 1.94 in [49.28 mm] 0.51 lbs [231.33 g]

N Female N Female N Female

-55 to +85 deg C -65 to +125 deg C

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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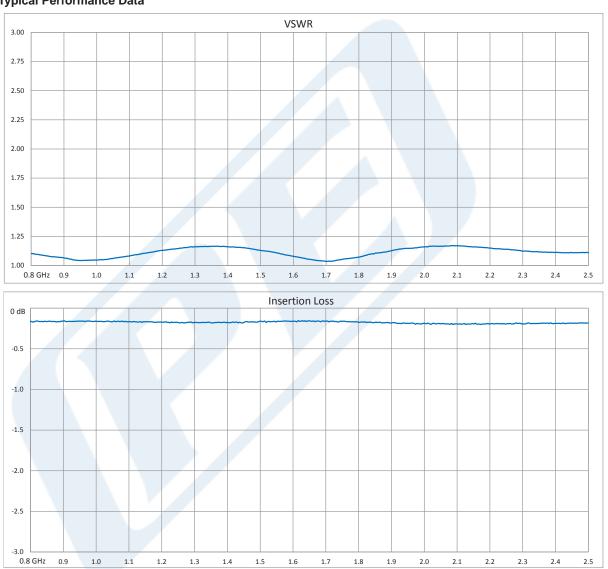
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Typical Performance Data

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**Coupling Value** 0 dB -10 -20 -30 -40 -50 -60 0.8 GHz 0.9 1.5 1.7 2.0 2.5 1.0 1.1 1.2 1.3 1.4 1.6 1.8 1.9 2.1 2.2 2.3 2.4 Directivity 0 dB -10 -20 -30 -40 -50 -60 -70 0.8 GHz 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5

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Directional 20 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.

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URL: https://www.pasternack.com/directional-20-db-n-coupler-800-mhz-2.5-ghz-60-watts-pe2cp1023-20-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.

PE2CP1023-20 CAD Drawing

Directional 20 dB N Coupler From 800 MHz to 2.5 GHz Rated to 60 Watts

