



Directional 10 dB SMA Coupler From 2 GHz to 18 GHz Rated to 50 Watts

Couplers Technical Data Sheet

PE2CP000-10

Features

- Directional Coupler
- 2 to 18 GHz Frequency Range
- Coupling 10±1 dB
- Directivity > 12 dB
- VSWR < 1.5:1
- Max Power 50 Watts (CW)

Applications

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

Description

Directional couplers are indispensable components for isolating, separating and combining signals. For example, they provide a simple way of sampling microwave signals. They also can make accurate attenuator measurements since reflections are eliminated. The PE2CP000-10 is a 10 dB directional coupler that operates from 2 to 18 GHz with 12 dB directivity minimum and 1.5:1 VSWR maximum. The package interface uses SMA female connectors, and is also RoHS compliant.

The PE2CP000-10 is part of Pasternack's family of directional/dual-directional couplers that offer coupling ratio up to 50 dB with excellent performance featuring high directivity, low insertion loss and VSWR. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, VSWR measurements, power combining and distribution.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		18	GHz
Impedance		50		Ohms
Coupling		10 ±1		dB
Frequency Sensitivity			±1	dB
Insertion Loss		0.7		dB
Directivity	12			dB
Main Line VSWR			1.5:1	
Input Power (CW)			50	Watts

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

Mechanical Specifications

Size	
Length	1.69 in [42.93 mm]
Width/Dia.	0.59 in [14.99 mm]
Height	0.43 in [10.92 mm]
Weight	0.0735 lbs [33.34 g]

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 2 GHz to 18 GHz Rated to 50 Watts PE2CP000-10](#)



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Configuration

Package Type	Connectorized
Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C
Storage Range	-55 to +100 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Directional 10 dB SMA Coupler From 2 GHz to 18 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 99.4% 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 10 dB SMA Coupler From 2 GHz to 18 GHz Rated to 50 Watts PE2CP000-10](#)

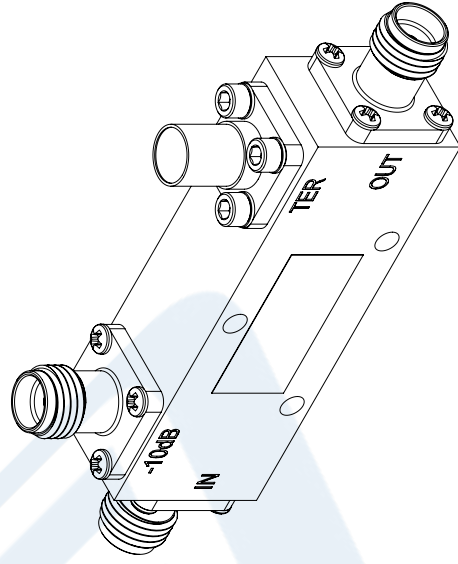
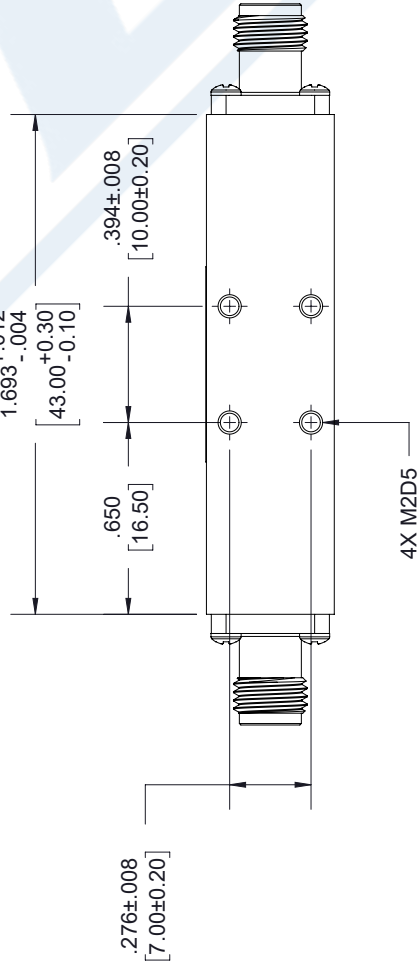
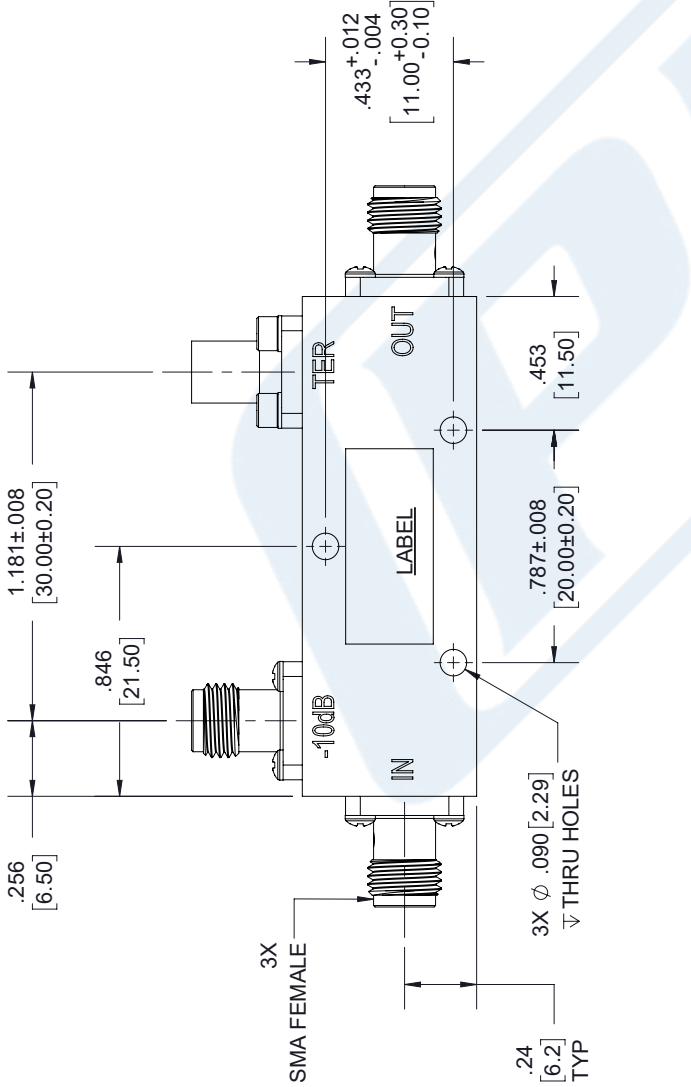
URL: <https://www.pasternack.com/directional-10-db-sma-coupler-18-ghz-pe2cp000-10-p.aspx>

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PE2CP000-10 CAD Drawing

Directional 10 dB SMA Coupler From 2 GHz to 18 GHz Rated to 50 Watts

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR PE2CP000-XX 20190429	04/30/19	S.PONG



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

TOLERANCES:
X±.2 [5.08] FRACTIONS
XX±.01 [.25] ±.132
.XXX±.005 [.13] ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

PE PASTERNAK
an INFINITO brand

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SHEET 1 OF 1
SCALE N/A

SIZE A
CAGE DRAWN BY K.DANG
PART NUMBER PE2CP000-10
REV 1.1

LABEL:
PASTERNAK
PE2CP000-10
SN: XXXXXXXXX

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