PASTERNACK®
THE ENGINEER'S RF SOURCE

Directional 10 dB SMA Coupler From 4 GHz to 18 GHz Rated to 10 Watts

Couplers Technical Data Sheet PE2216-10

Features

- Directional Coupler
- 4 to 18 GHz Frequency Range
- Coupling 10±1 dB
- Directivity > 12 dB
- VSWR < 1.4:1
- Max Power 10 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 PE2216-10 is a 10 dB directional coupler that operates from 4 to 18 GHz and can handle up to 10 Watts (CW) with 12 dB directivity minimum and 1.4:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The PE2216-10 is part of Pasternack's family of directional/dual-directional couplers that offer coupling ratios 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	4		18	GHz
Impedance		50		Ohms
Coupling		10 ±1		dB
Frequency Sensitivity			±0.5	dB
Insertion Loss			0.8	dB
Directivity	12			dB
Main Line VSWR			1.4:1	
Secondary Line VSWR			1.4:1	
Input Power (CW)			10	Watts

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 4 GHz to 18 GHz Rated to 10 Watts PE2216-10

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	4 to 12	12 to 18				GHz
Directivity, Min	15	12				dB

Electrical Specification Notes:
Values at 25°C, sea level.
Insertion loss does not include coupled power.
Max input power rated for load VSWR better than 1.20:1.

Mechanical Specifications

Size

Length	1.36 in [34.54 mm]
Width/Dia.	0.4 in [10.16 mm]
Height	1.31 in [33.27 mm]
Weight	0.06 lbs [27.22 g]

Configuration

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

Environmental Specifications

Temperature

Operating Range	-25 to +80 deg C
Storage Range	-55 to +150 deg C
Humidity	MIL-STD-202, Method 106 (90% relative humidity, +65°C)
Shock	MIL-STD-202, Method 213/I (100 G's, 6 ms)
Vibration	MIL-STD-202, Method 204/D (10 to 2,000 Hz, 20 G's, 12 hours)
Altitude	MIL-STD-202, Method 105/E (150,000 feet)
Thermal Shock	MIL-STD-202, Method 107/B (-55°C to +85°C)

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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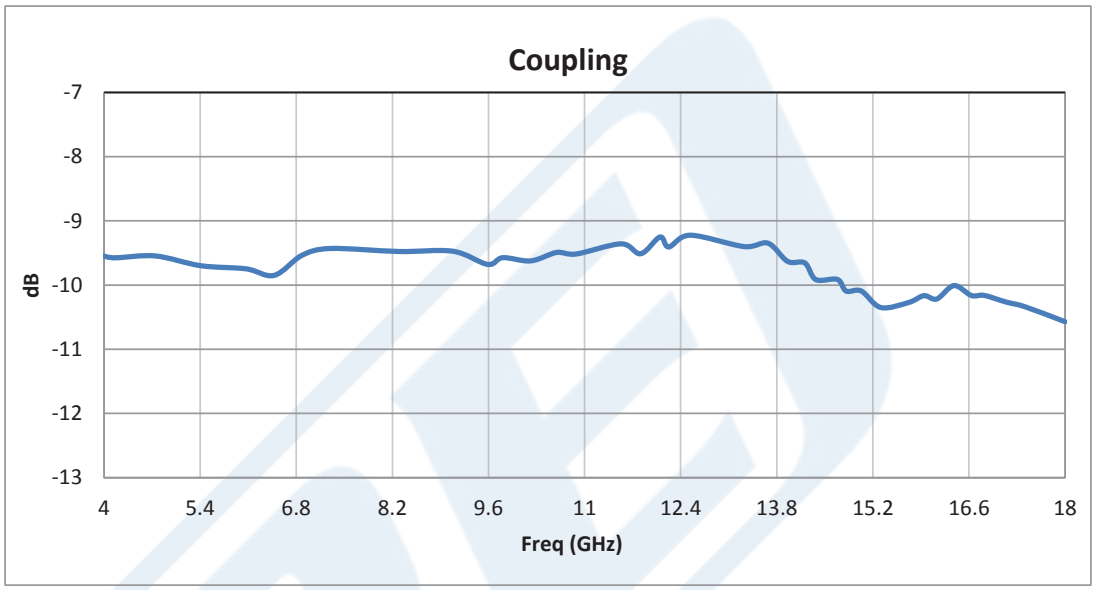
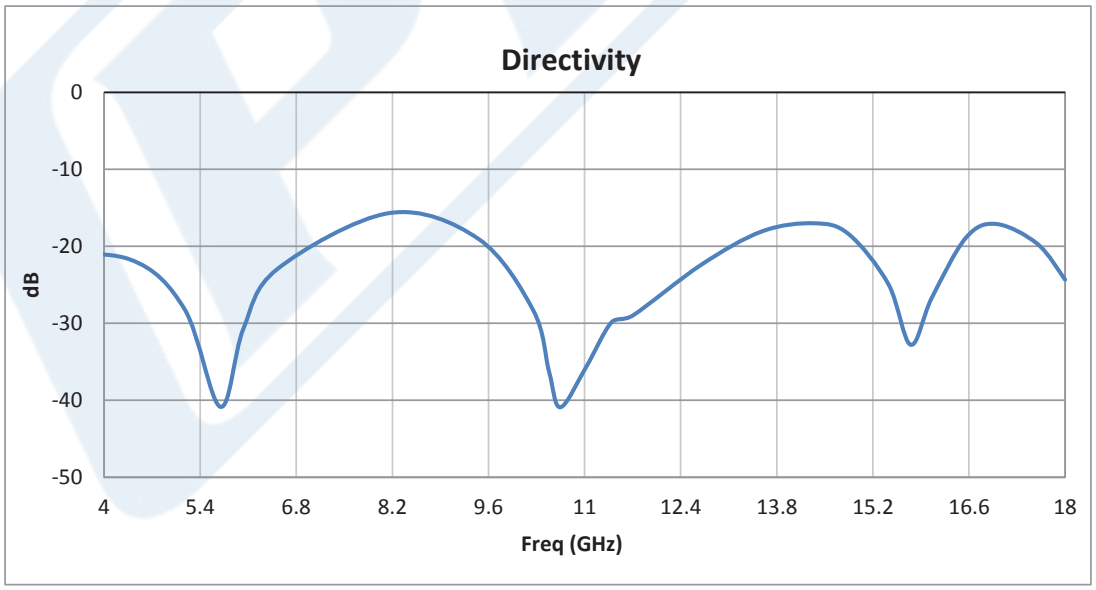
Typical Performance Data





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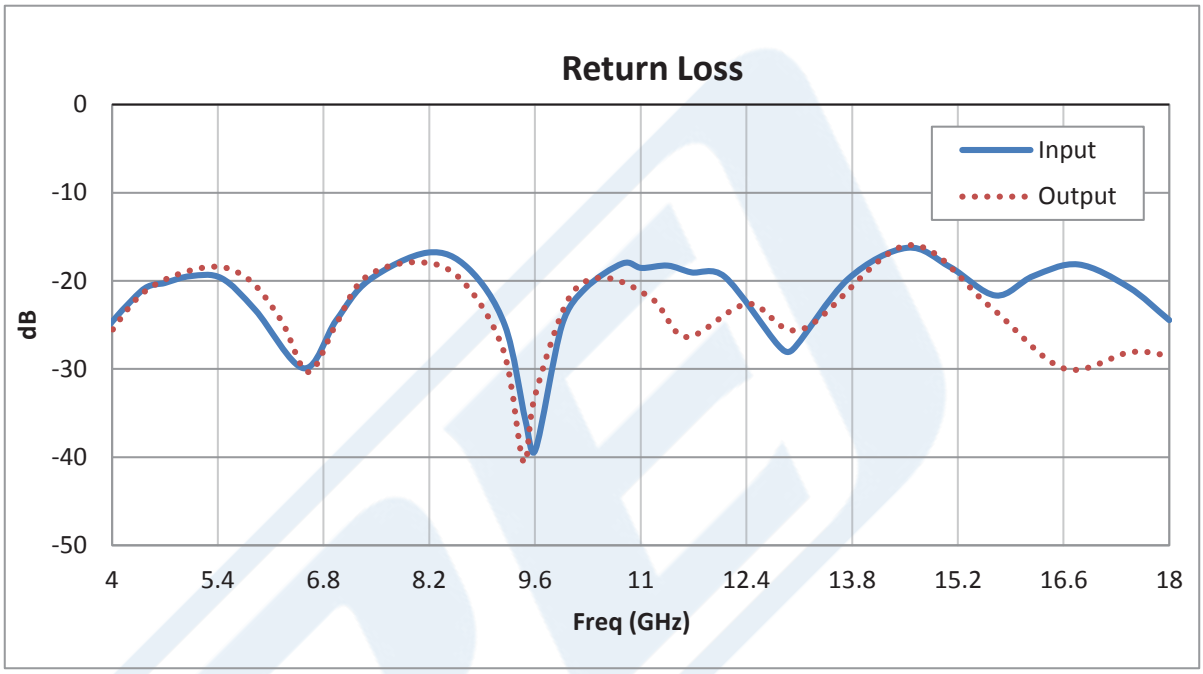

Directional 10 dB SMA Coupler From 4 GHz to 18 GHz Rated to 10 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/directional-10-db-sma-coupler-4-18-ghz-50-watts-pe2216-10-p.aspx

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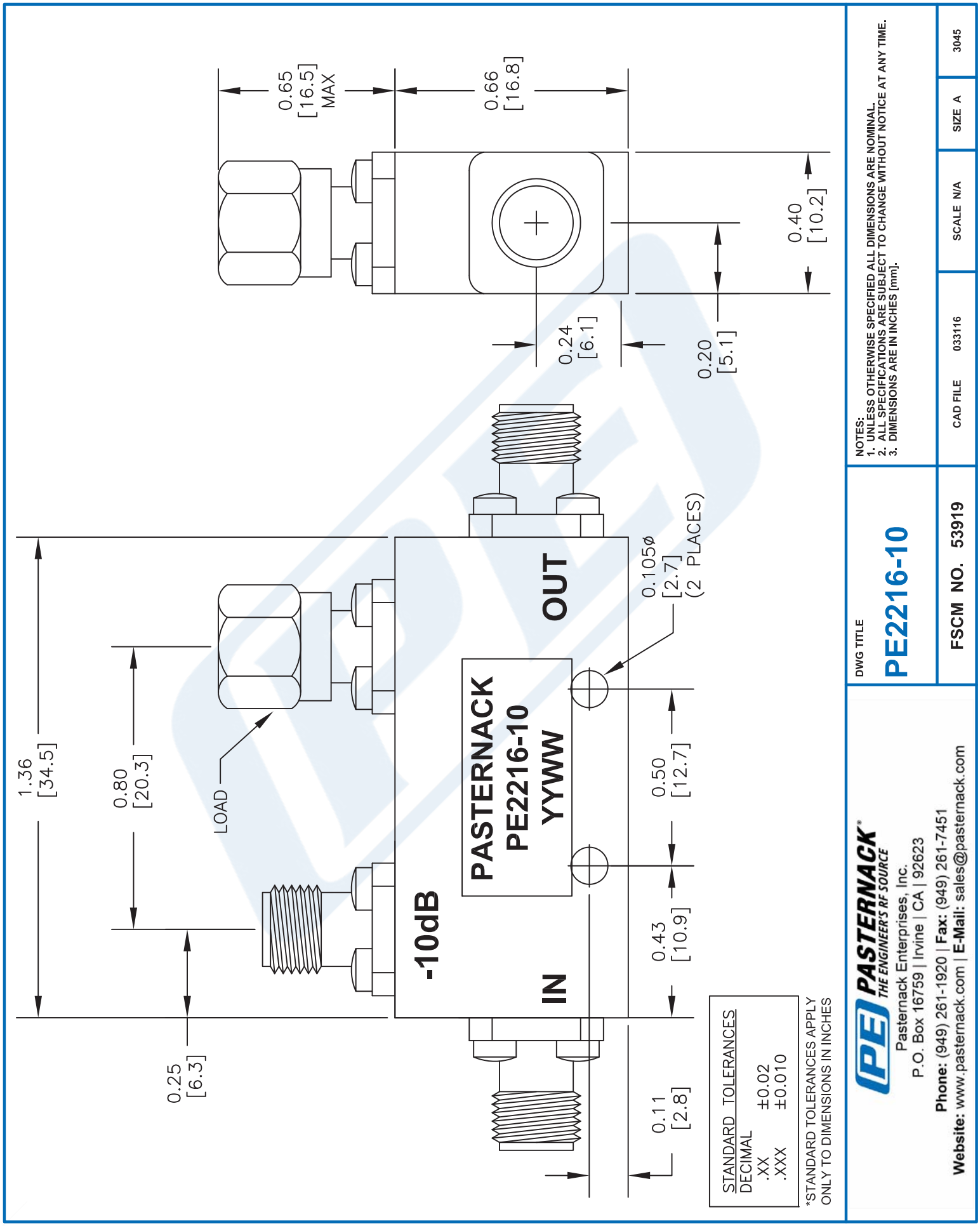
PE2216-10 CAD Drawing

Directional 10 dB SMA Coupler From 4 GHz to 18 GHz Rated to 10 Watts



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