



Directional 20 dB SMA Coupler From 4 GHz to 12.4 GHz Rated to 50 Watts

Couplers Technical Data Sheet

PE2211-20

Features

- Directional Coupler
- 4 to 12.4 GHz Frequency Range
- Coupling 20±1 dB
- Directivity > 17 dB
- VSWR < 1.3:1
- 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 PE2211-20 is a 20 dB directional coupler that operates from 4 to 12.4 GHz and can handle up to 50 Watts (CW) with 17 dB directivity minimum and 1.3:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The PE2211-20 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		12.4	GHz
Impedance		50		Ohms
Coupling		20 ±1		dB
Frequency Sensitivity		±0.6		dB
Main Line Loss		0.5		dB
Insertion Loss		0.45		dB
Directivity	17			dB
Main Line VSWR			1.3:1	
Secondary Line VSWR			1.3:1	
Input Power (CW)			50	Watts
Reverse Power (CW)			50	Watts
Input Power (Peak)			3	KWatts

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 SMA Coupler From 4 GHz to 12.4 GHz Rated to 50 Watts PE2211-20](#)



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Electrical Specification Notes:

Values at 25°C, sea level.

Coupling tolerance includes frequency sensitivity.

Main line loss is the difference in power level between input and output.

Insertion loss excludes coupled power from main line loss.

Mechanical Specifications

Size

Length	1.22 in [30.99 mm]
Width/Dia.	0.38 in [9.65 mm]
Height	1.11 in [28.19 mm]
Weight	0.055 lbs [24.95 g]

Configuration

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

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

Plotted and Other Data

Notes:

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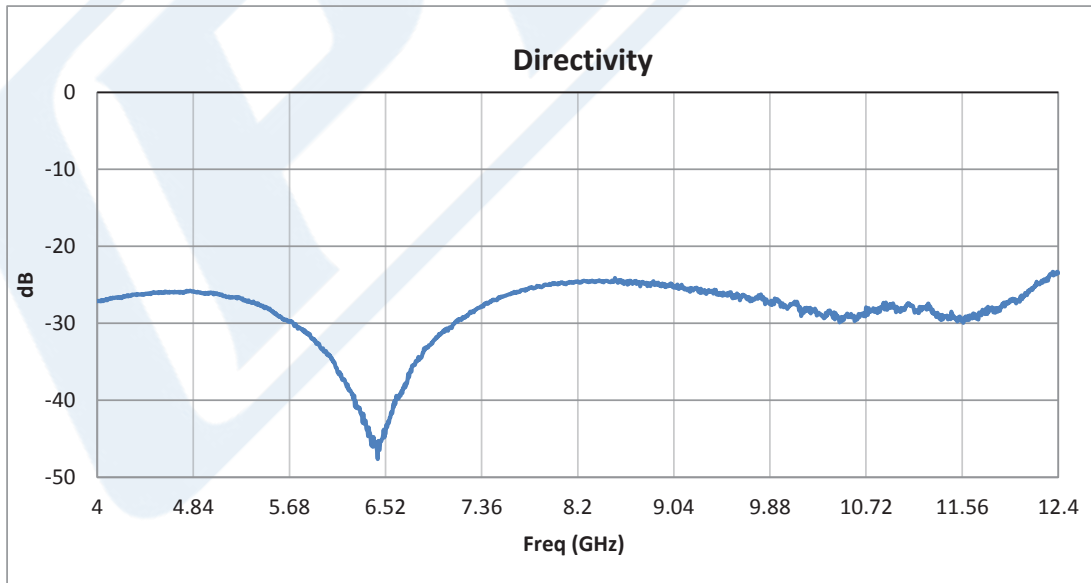
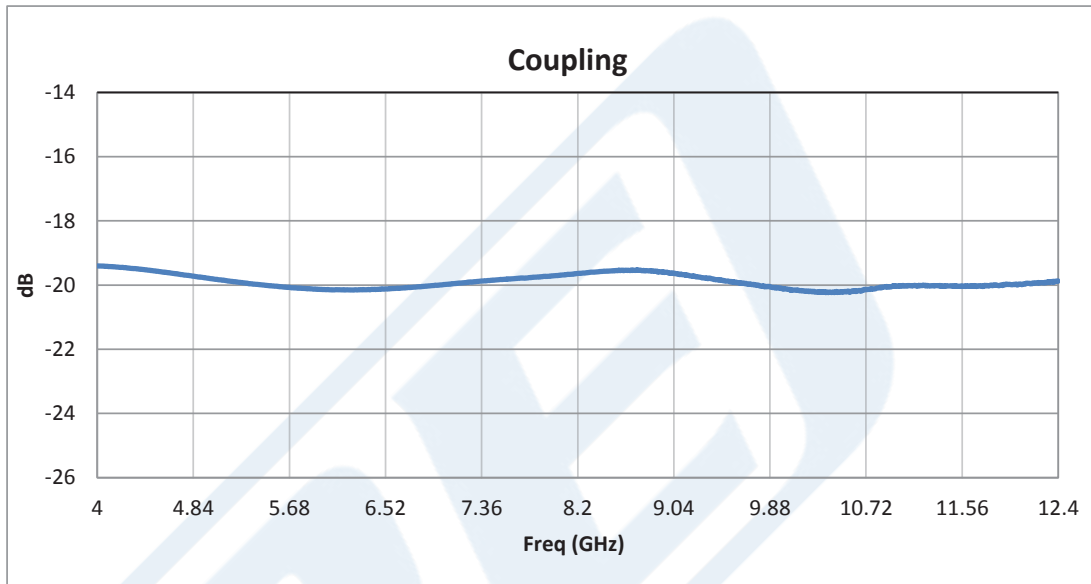


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Typical Performance Data



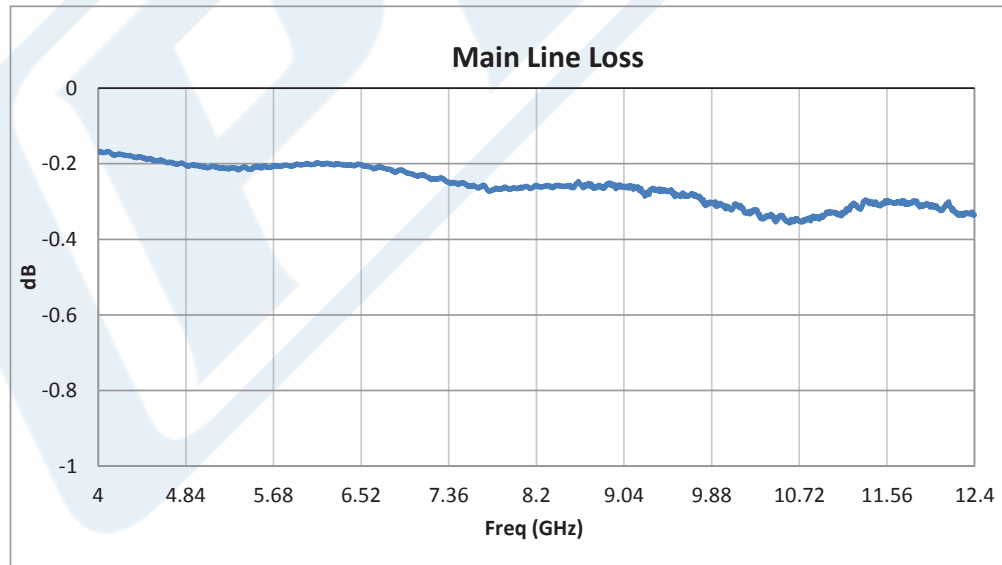
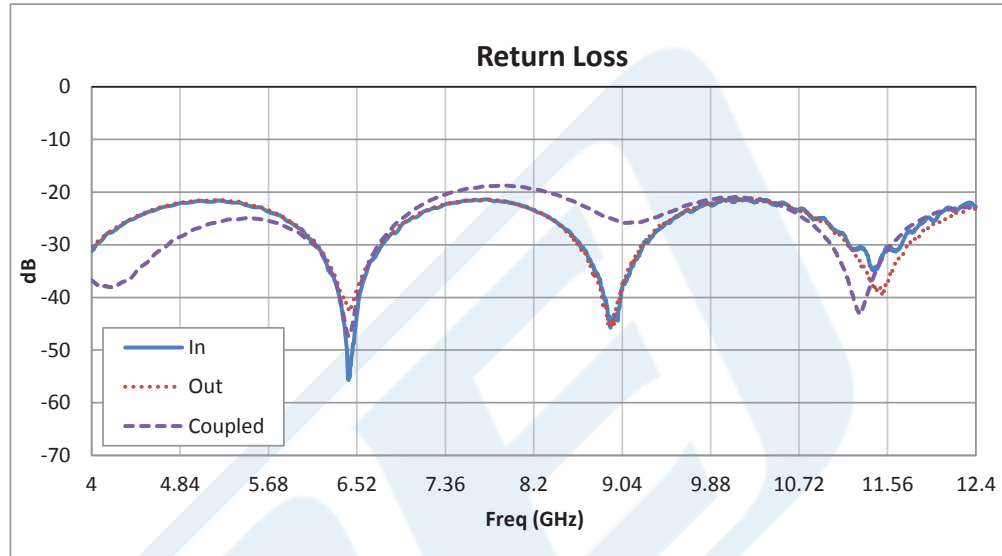
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Directional 20 dB SMA Coupler From 4 GHz to 12.4 GHz Rated to 50 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

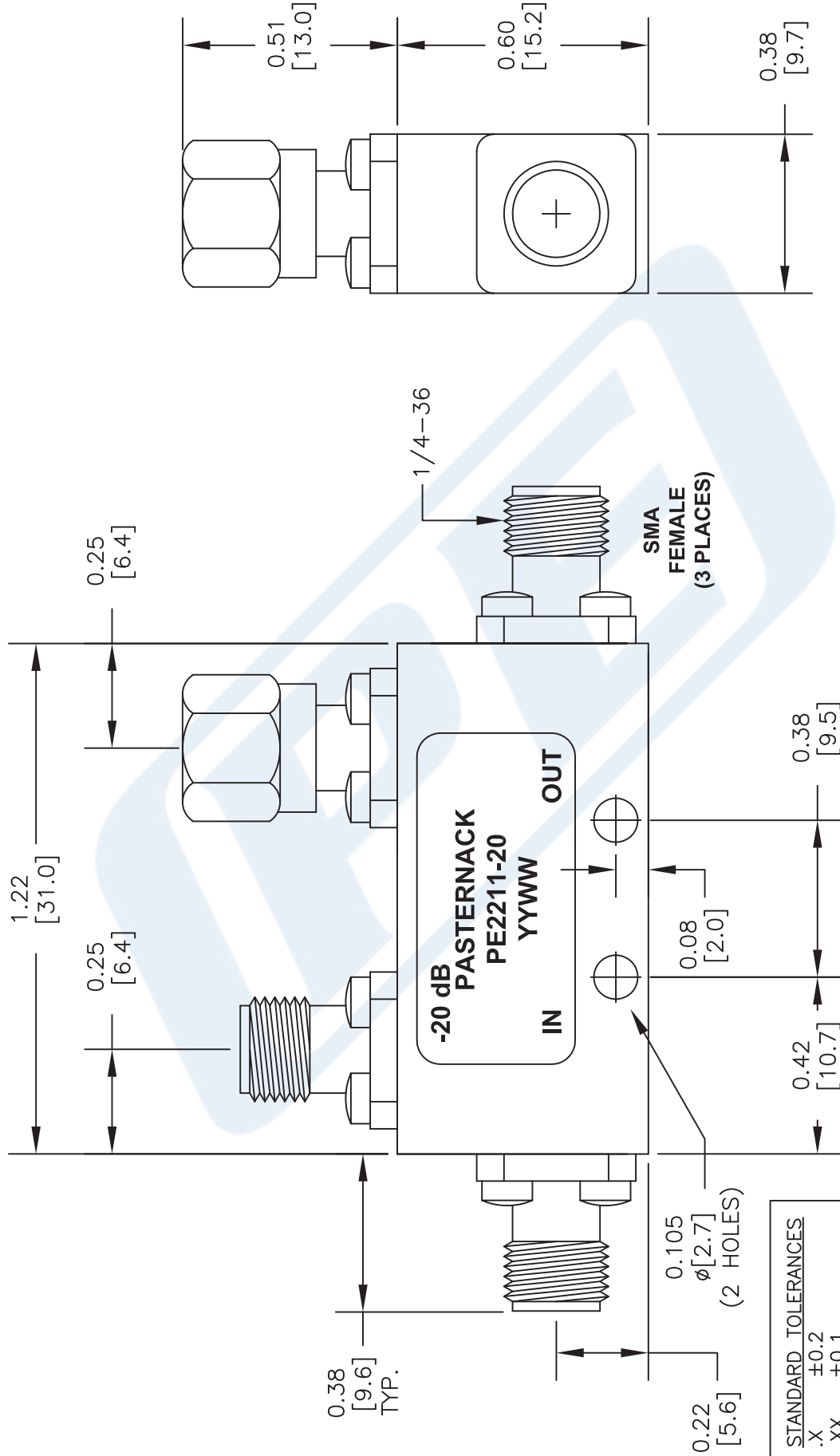
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PE2211-20 CAD Drawing

Directional 20 dB SMA Coupler From 4 GHz to 12.4 GHz Rated to 50 Watts



DWG TITLE

PE2211-20

FSCM NO. 53919

CAD FILE 033116

SCALE N/A

SIZE A

3045

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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