PASTERNACK®
THE ENGINEER'S RF SOURCE

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Couplers Technical Data Sheet PE2202-30

Features

- Directional Coupler
- 2 to 4 GHz Frequency Range
- Coupling 30±1.25 dB
- Directivity > 22 dB
- Low VSWR < 1.15:1
- 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 PE2202-30 is a 30 dB directional coupler that operates from 2 to 4 GHz and can handle up to 50 Watts (CW) with 22 dB directivity minimum and 1.15:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The PE2202-30 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	2		4	GHz
Impedance		50		Ohms
Coupling		30 ±1.25		dB
Frequency Sensitivity		±0.7		dB
Main Line Loss		0.2		dB
Insertion Loss		0.15		dB
Directivity	22			dB
Main Line VSWR			1.15:1	
Secondary Line VSWR			1.15:1	
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 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2202-30

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

ISO 9001 : 2008 Registered

© 2016 Pasternack Enterprises All Rights Reserved

PASTERNACK®
THE ENGINEER'S RF SOURCE

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Couplers Technical Data Sheet PE2202-30

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	1.16 in [29.46 mm]
Width/Dia.	0.38 in [9.65 mm]
Height	1.06 in [26.92 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:

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 SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2202-30

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

ISO 9001 : 2008 Registered

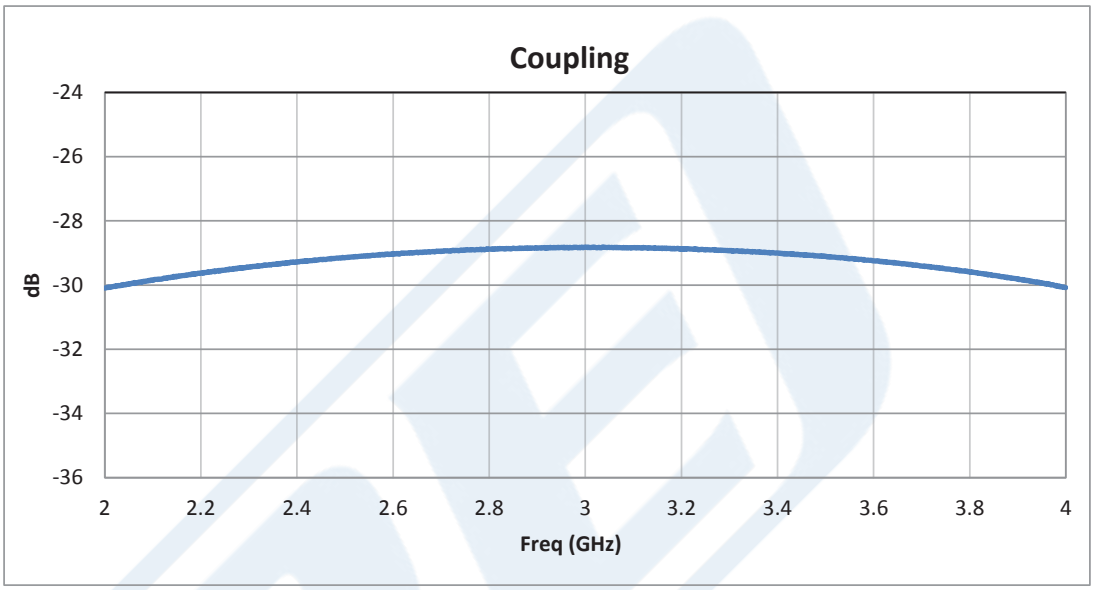
© 2016 Pasternack Enterprises All Rights Reserved

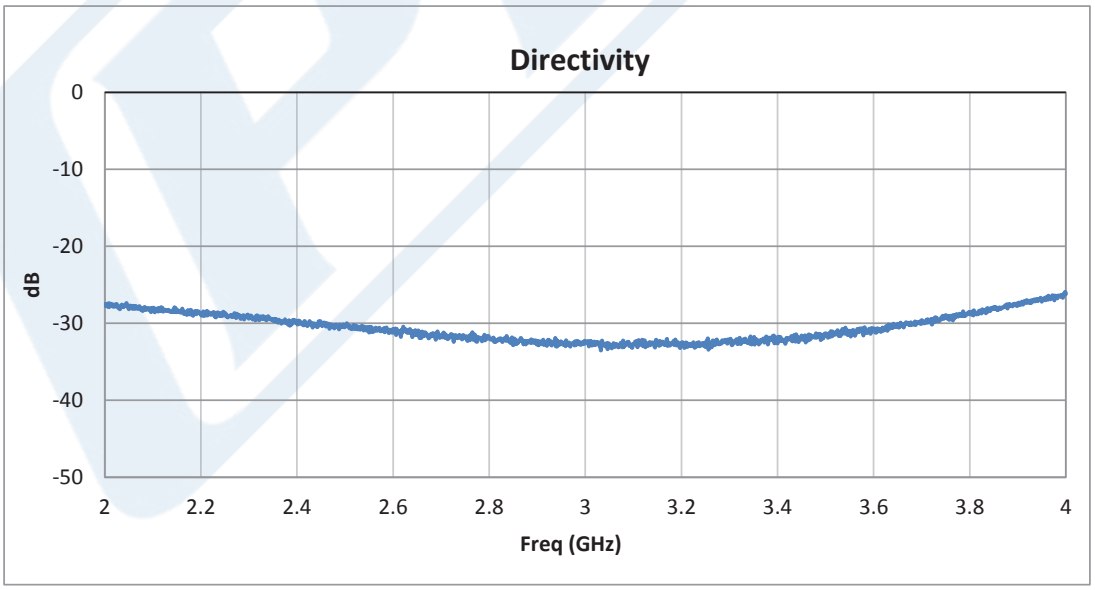
PASTERNACK®
THE ENGINEER'S RF SOURCE

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Couplers Technical Data Sheet PE2202-30

Typical Performance Data





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 SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2202-30

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

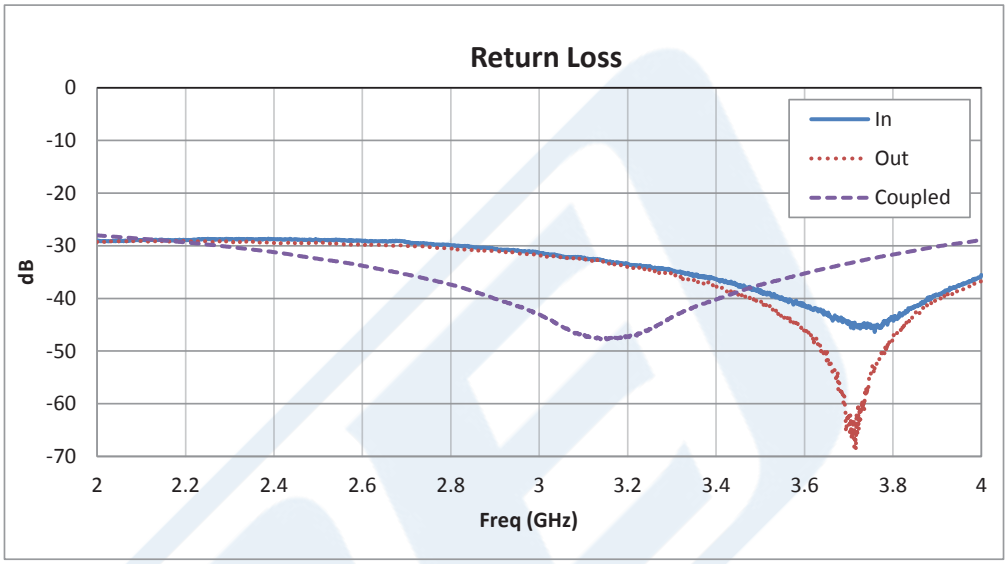
ISO 9001 : 2008 Registered

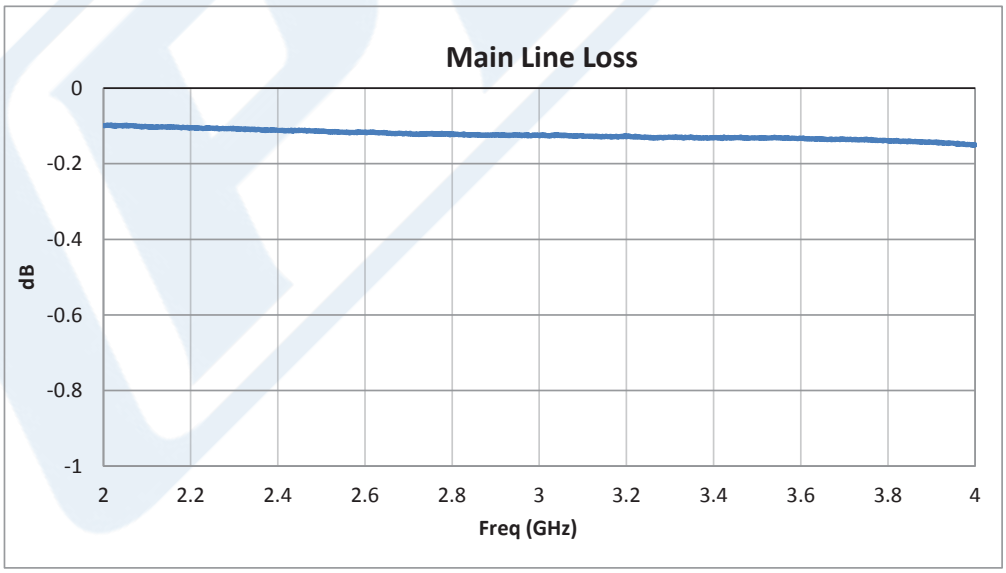
© 2016 Pasternack Enterprises All Rights Reserved

PASTERNACK®
THE ENGINEER'S RF SOURCE

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Couplers Technical Data Sheet PE2202-30





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 SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2202-30

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

ISO 9001 : 2008 Registered

© 2016 Pasternack Enterprises All Rights Reserved

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts

Couplers Technical Data Sheet PE2202-30

Directional 30 dB SMA Coupler From 2 GHz to 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.

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 SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts PE2202-30

URL: http://www.pasternack.com/directional-30-db-sma-coupler-2-4-ghz-50-watts-pe2202-30-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.

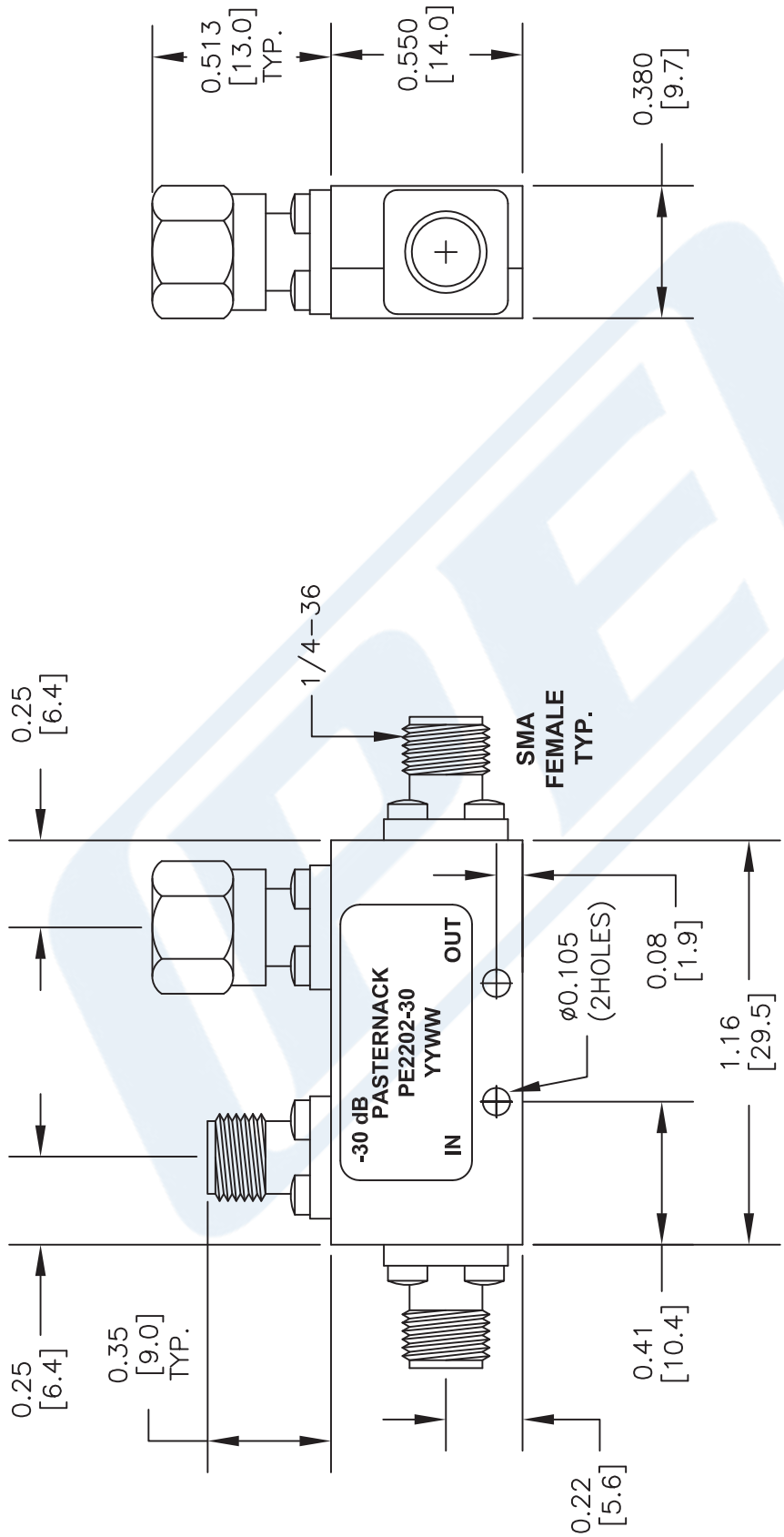
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

ISO 9001 : 2008 Registered

© 2016 Pasternack Enterprises All Rights Reserved

PE2202-30 CAD Drawing

Directional 30 dB SMA Coupler From 2 GHz to 4 GHz Rated to 50 Watts



STANDARD TOLERANCES
.X ±0.2
.XX ±0.1
.XXX ±0.05

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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
PE2202-30

FSCM NO. 53919

CAD FILE 032816

SCALE N/A

SIZE A

3045

PASTERNACK
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com

© 2016 Pasternack Enterprises All Rights Reserved