



WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz

TECHNICAL DATA SHEET

PEWCP1010

The PEWCP1010 is a WR-51 Directional Broadwall waveguide coupler that operates in the frequency range of 15 to 22 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 20, or 30 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Pasternack offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

Features

- Broadwall Waveguide Coupler
- 30 dB Nominal Coupling Level
- 15 GHz to 22 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

Applications

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

Electrical Specifications (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
Directivity		35		dB
Insertion Loss		0.15		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		30		dB

Mechanical Specifications

Size

Length	12 in [304.8 mm]
Height	2.776 in [70.51 mm]
Weight	0.866 lbs [392.81 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz PEWCP1010](#)



WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz

TECHNICAL DATA SHEET

PEWCP1010

Configuration

Design Directional E-Plane Broadwall
Size WR-51

Description	Input Flange	Output Flange	Coupled Flange(s)
Flange Type	Square Cover	Square Cover	Square Cover
Material	Copper Alloy	Copper Alloy	Copper Alloy
Plating	Silver	Silver	Silver

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

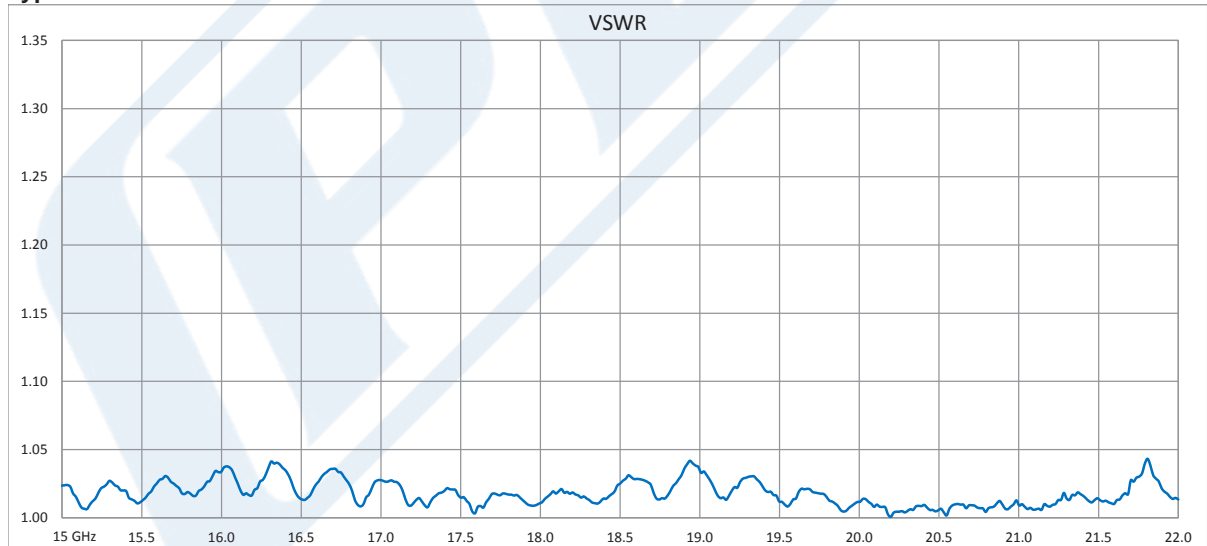
RoHS Compliant
REACH Compliant 12/17/2015

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



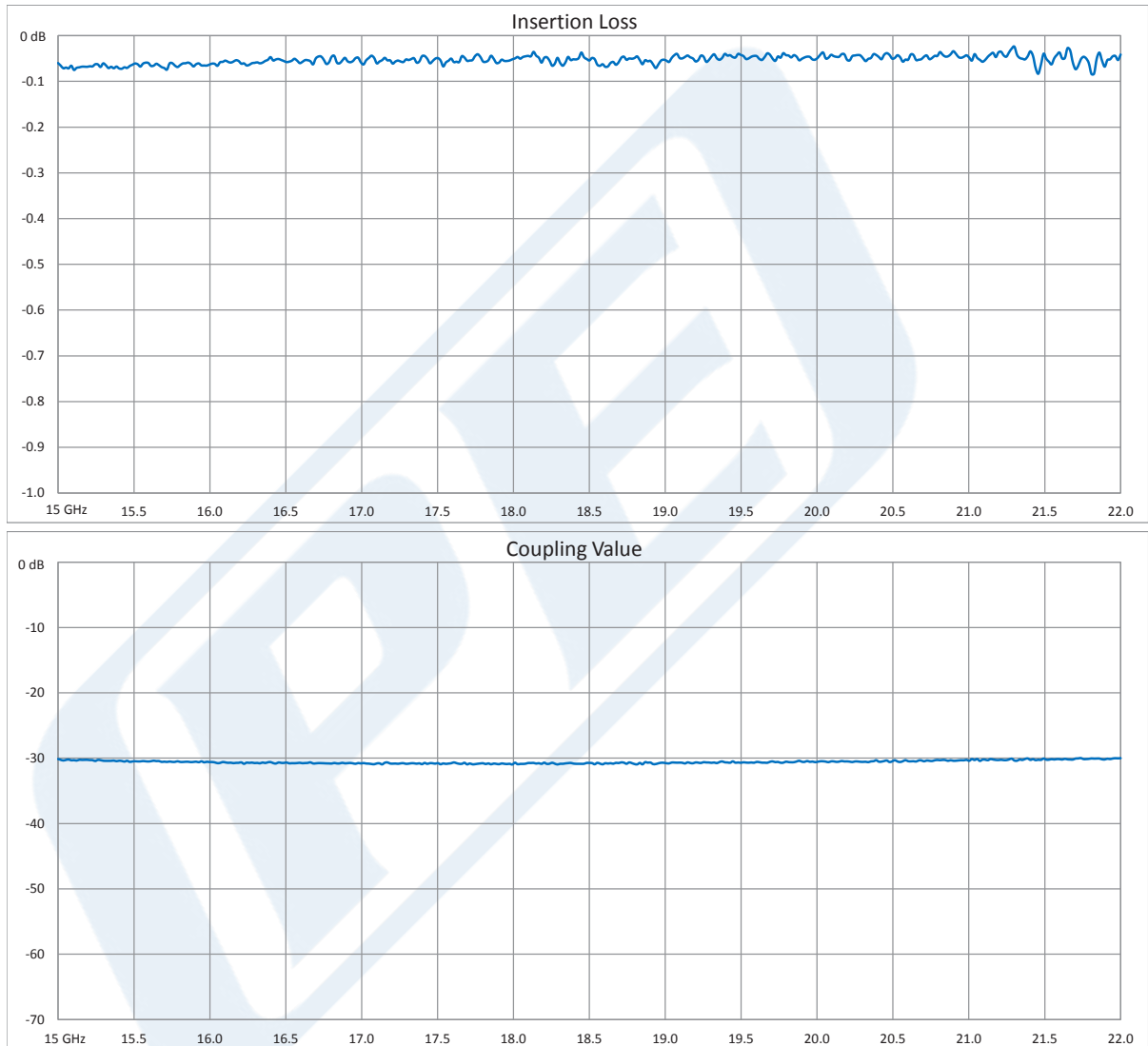
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz PEWCP1010](#)



WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz

TECHNICAL DATA SHEET

PEWCP1010



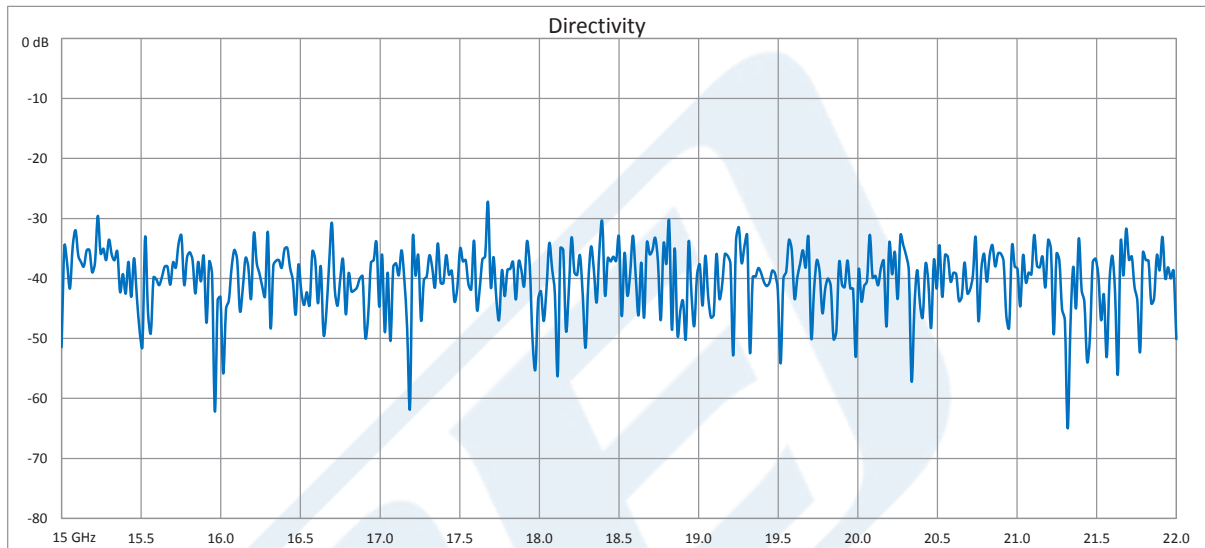
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz PEWCP1010](#)



WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz

TECHNICAL DATA SHEET

PEWCP1010



WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz 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.

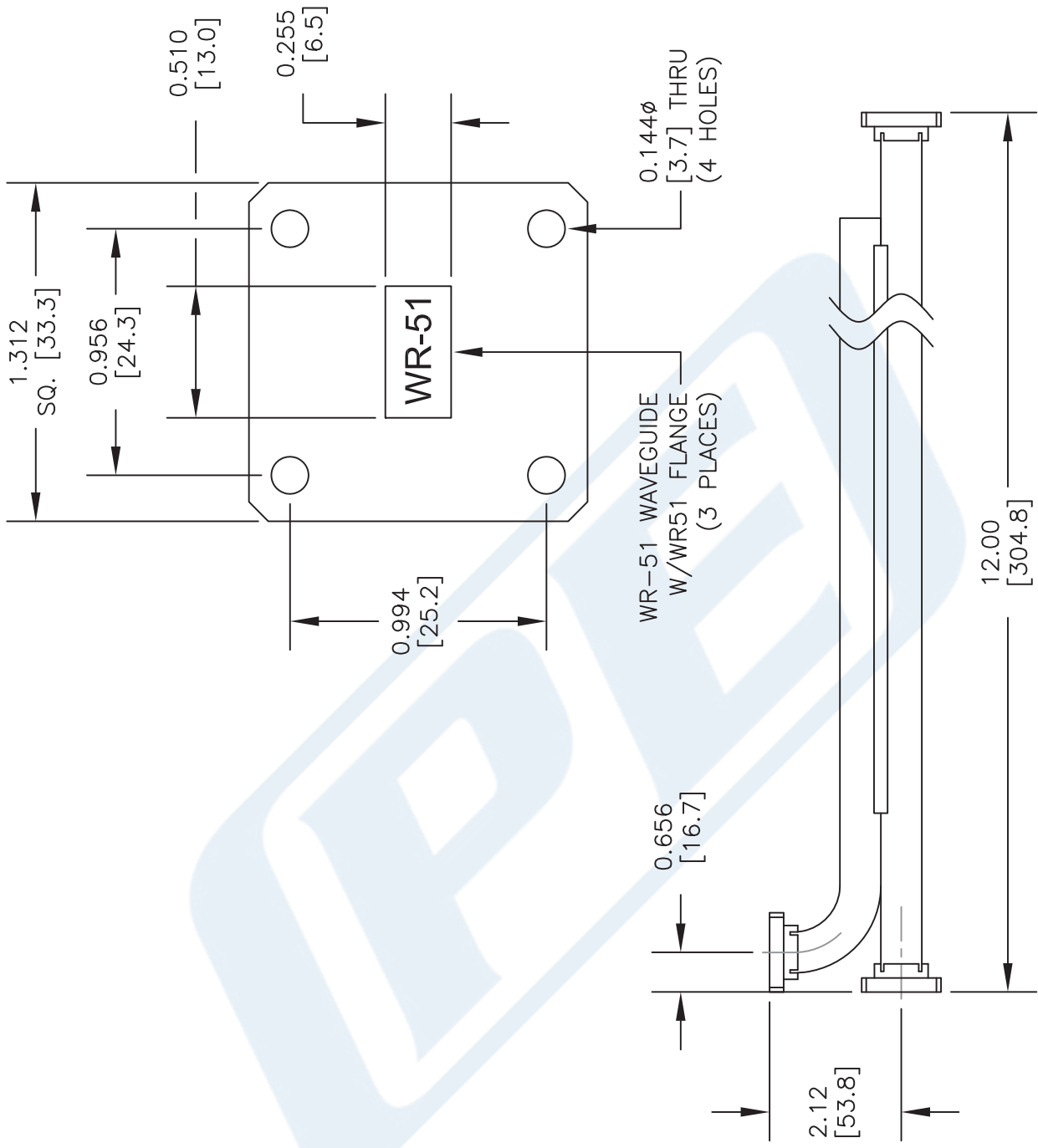
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz PEWCP1010](http://www.pasternack.com/wr-51-30-db-directional-waveguide-broadwall-coupler-square-e-pewcp1010-p.aspx)

URL: <http://www.pasternack.com/wr-51-30-db-directional-waveguide-broadwall-coupler-square-e-pewcp1010-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.

PEWC1010 CAD Drawing

WR-51 30 dB Directional Waveguide Broadwall Coupler, Square Cover Flange, E-Plane Coupled Port, 15 GHz to 22 GHz



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
 DECIMALS ±0.030
 ANGLES ±1/2 DEG.
 FRACTIONS ±0.015
 .XXX ±.005

* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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
PEWC1010

PE PASTERNAK®
 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

FSCM NO. 53919

CAD FILE 051016 SCALE N/A SIZE A 2233