

WR-112 Waveguide 30 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 6.57 GHz to 9.99 GHz, Copper



## **Waveguide Couplers Technical Data Sheet**

#### PEW112CP001-30

The PEW112CP001-30 is a WR-112 Directional Broadwall waveguide coupler with N female coupled port that operates in the frequency range of 6.57 to 9.99 GHz. This Waveguide component has a maximum VSWR of 1.25:1. 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, 30, 40 or 50 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**

- · Three Port Broadwall Waveguide Coupler
- 30±0.7 dB Nominal Coupling Level
- Integrated N Female Connector coupled port
- 6.57 GHz to 9.99 GHz Frequency Range

Source Leveling

- Main Line VSWR < 1.1:1</li>
- Max Power 400W (CW)

#### **Applications**

- Test Benches
- Radar
- Satellite

- Microwave Radio
- · Attenuation Measurements
- · Power Measurements

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	6.57		9.99	GHz
Coupler				
Nominal Coupling Level		30		dB
Directivity	30			dB
Insertion Loss			0.1	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Coupling Flatness			±0.7	dB
Input Power (CW)			400	Watts
Input Power, Peak			200	kWatts

#### **Mechanical Specifications**

Size

 Length
 13.78 in [350.01 mm]

 Width
 1.88 in [47.75 mm]

 Height
 1.88 in [47.75 mm]

 Weight
 1.875 lbs [850.49 g]

 Flange Type
 UG Cover

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-112 Waveguide 30 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 6.57 GHz to 9.99 GHz, Copper PEW112CP001-30

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Flange Material and Plating RF Connector Type

N Female

Coupler Body Material and Plating

Copper, Passivated

Copper, Passivated

**Environmental Specifications** 

Compliance Certifications (see product page for current document)

**Plotted and Other Data** 

Notes:

WR-112 Waveguide 30 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 6.57 GHz to 9.99 GHz, Copper 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.

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URL: https://www.pasternack.com/wr112-waveguide-30db-broadwall-coupler-ug-9.99mhz-pew112cp001-30-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.

# PEW112CP001-30 CAD Drawing

WR-112 Waveguide 30 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 6.57 GHz to 9.99 GHz, Copper ш INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 **APPROVED** WR-112 Waveguide broadwall coupler, 30dB with N-type female SPONG 1 P SHEET 4X Ø.16 [4.2] PEW112CP001-30 NONE CHANGED BY HBAKKE [37.4] 34.3 PASTERNACK ITEM NO. Website: www.Pasternack.com Phone: 1.866.727.8376 | 1.949.261.1920 05/31/2023 connector DATE [47.8] 28.5 1.88 an INFINIT® brand HBAKKE REVISION DRAWN BY 47.8 4X R.12[3.0] 12.6 INITIAL RELEASE DESCRIPTION CAGE CODE SIZE ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. ± 1/32 ANGLES ± 1° <12 [305] = +1 [25] /-0
>12 [305] ≤ 60 [1524] = +2 [51] /-0
>60 [1524] ≤ 120 [3048] = +4 [102] /-0
>120 [3048] ≤ 300 [7620] = +6 [152] /-0 UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS FRACTIONS CABLE LENGTH TOLERANCES: >300 [7620] = +5% / -0 က CONNECTOR N FEMALE TOLERANCES: ÆV ⋖  $X = \pm .2$  [5]  $X = \pm .02$  [.5]  $X = \pm .02$  [.5]  $X = \pm .005$  [.13] ZONE THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PRAT OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED.
THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO US. LAW PROHIBITED. 13.78 [350.0] 2X WR-112 WAVEGUIDE FBP84/UG-COVER FLANGE LC. .20 [5.0] X ш Ш © 2020 Pasternack Enterprises All Rights Reserved PEW112CP001-30 REV 1 В 3