

WR-90 Waveguide 60 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 8.2 GHz to 12.5 GHz, Copper



Waveguide Couplers Technical Data Sheet

PEW90CP001-60

The PEW90CP001-60 is a WR-90 Directional Broadwall waveguide coupler with N female coupled port that operates in the frequency range of 8.2 to 12.5 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
- 60 ± 0.7 dB Nominal Coupling Level
- Integrated N Female Connector coupled port
- 8.2 GHz to 12.5 GHz Frequency Range
- Main Line VSWR < 1.1:1
- Max Power 300W (CW)

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.5	GHz
Coupler				
Nominal Coupling Level		60		dB
Directivity	20			dB
Insertion Loss			0.15	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Coupling Flatness		± 0.7		dB
Input Power (CW)			300	Watts
Input Power, Peak			200	kWatts

Mechanical Specifications

Size

Length	9.84 in [249.94 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	1.045 lbs [474 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-90 Waveguide 60 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 8.2 GHz to 12.5 GHz, Copper PEW90CP001-60](#)

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Flange Material and Plating

RF Connector Type

Copper, Passivated

N Female

Coupler Body Material and Plating

Copper, Passivated

Environmental Specifications

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

WR-90 Waveguide 60 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 8.2 GHz to 12.5 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Waveguide 60 dB Broadwall Coupler, UG Cover Flange, N-Type Female Coupled Port, 8.2 GHz to 12.5 GHz, Copper PEW90CP001-60](https://www.pasternack.com/wr90-waveguide-60db-broadwall-coupler-ug-12.5mhz-pew90cp001-60-p.aspx)

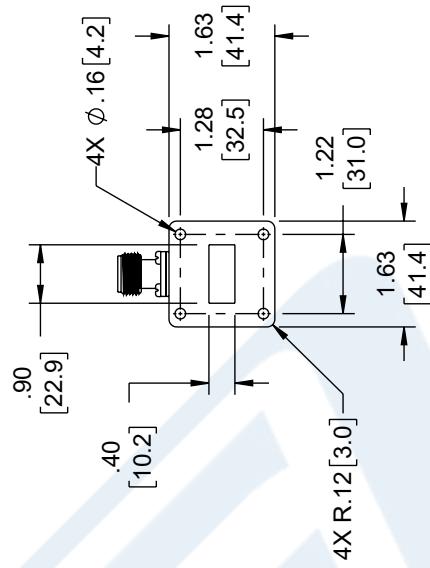
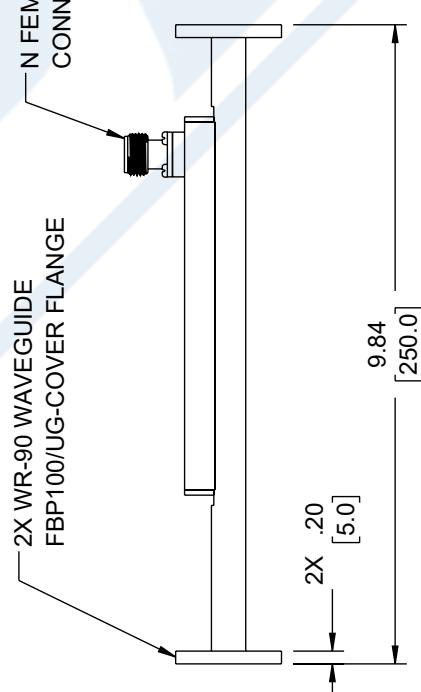
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PEW90CP001-60 CAD Drawing

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ZONE	REV	DESCRIPTION	REVISION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE		05/31/2023	HBAKKE	SPONG



 PASTERNACK® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5		REV A
		SCALE	SHEET	
		NONE	1 OF 1	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.281.1920		DESCRIPTION	WR-90 Waveguide broadwall coupler, 60dB with N-type female connector	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	PEW90CP001-60
A	53919	HBAKKE		
ONLY ONE COPY PER PART NUMBER				

UNLESS OTHERWISE SPECIFIED DIMMING DIMENSIONS ARE IN INCHES DIMMING DIMENSIONS IN 1/16 MILLIMETERS		
TOLERANCES:		
$X = \pm .2$	FRACTIONS	ANGLES $\pm 1^\circ$
$XXX = \pm .005$	$[.5]$	$\pm 1/32$
$XXXX = \pm .005$	$[.13]$	
CABLE LENGTH TOLERANCES:		
$>12 [305]$	$\pm 1/12 [25]$	-0
$>30 [762]$	$+2 [51]$	-0
$>60 [1524]$	$+2 [51]$	-0
$>120 [3048]$	$+4 [102]$	-0
$>180 [4572]$	$+6 [152]$	-0
$>300 [7620]$	$+8 [203]$	-0
$>600 [15240]$	$+10 [254]$	-0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE		

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