



WR-90 20 dB Waveguide Crossguide Coupler, CPR-90G Grooved Flange, 8.2 GHz to 12.4 GHz

TECHNICAL DATA SHEET

PEWCP1059

The PEWCP1059 is a WR-90 crossguide waveguide coupler that operates in the frequency range of 8.2 to 12.4 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a cross wall configuration that result in a mid-band nominal coupling value of 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. This WR-90 waveguide coupler uses grooved CPR-90 flanges. Pasternack offers a complete family of waveguide Crossguide and Top wall couplers that are in-stock and ship same day.

Features

- Crossguide Waveguide Coupler
- 20 dB Nominal Coupling Level
- 8.2 GHz to 12.4 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR
- Grooved CPR

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	8.2		12.4	GHz
Directivity		25		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		20		dB

Mechanical Specifications

Size	
Length	3 in [76.2 mm]
Width/Dia.	3 in [76.2 mm]
Weight	1.07 lbs [485.34 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 20 dB Waveguide Crossguide Coupler, CPR-90G Grooved Flange, 8.2 GHz to 12.4 GHz PEWCP1059](#)



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Configuration

Design Crossguide
Size WR-90

Description	Input Flange	Output Flange	Coupled Flange(s)
Flange Type	CPR-90G	CPR-90G	CPR-90G
Material	Copper Alloy	Copper Alloy	Copper Alloy

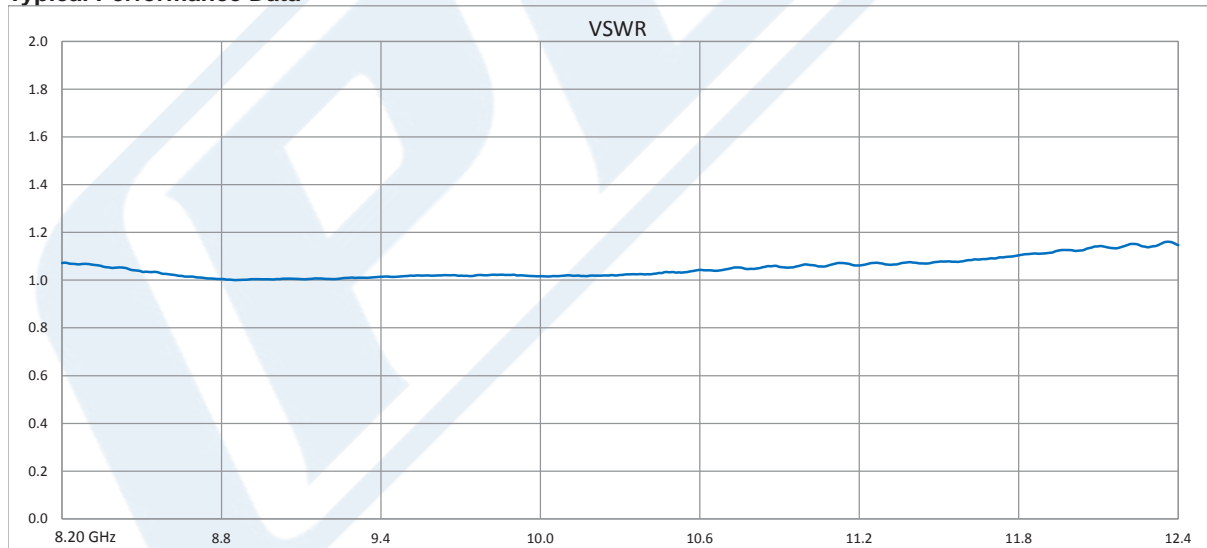
Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant
REACH Compliant 12/17/2015

Plotted and Other Data

Notes:
• Values at 25 °C, sea level

Typical Performance Data



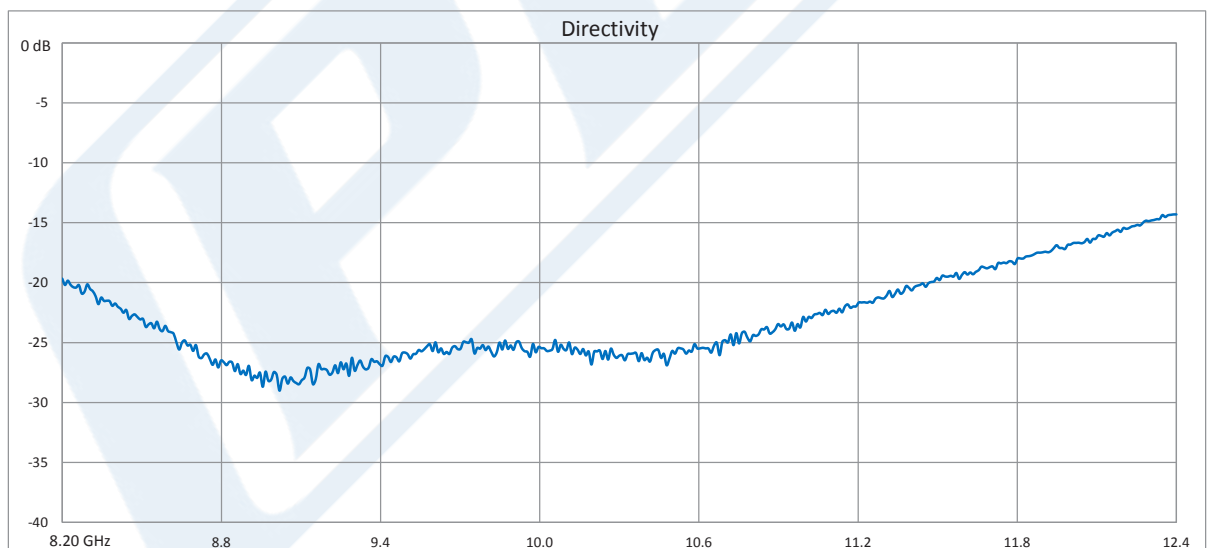
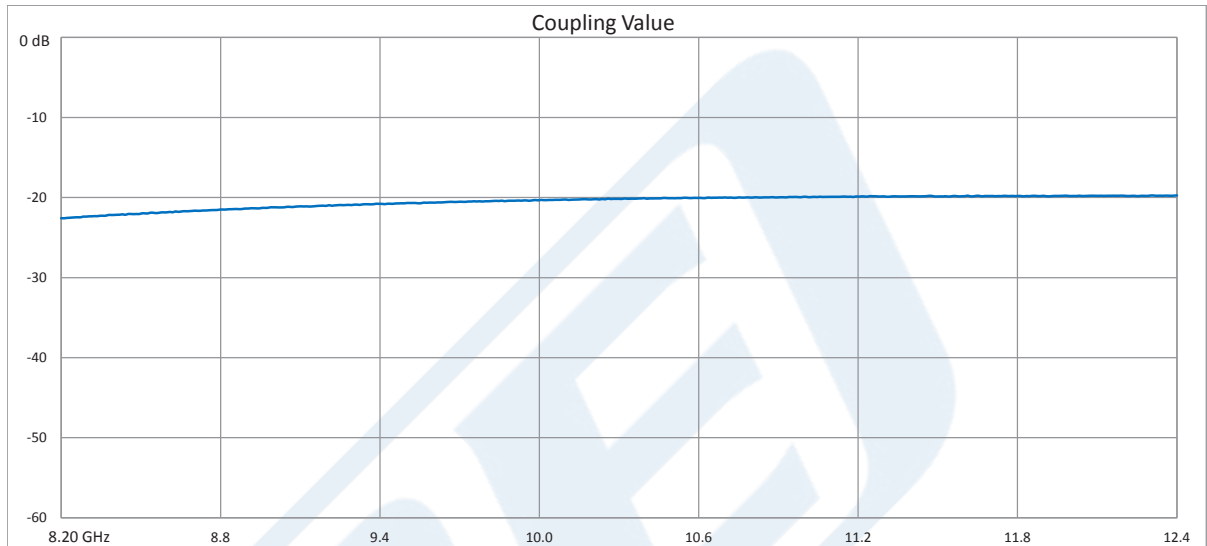
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WR-90 20 dB Waveguide Crossguide Coupler, CPR-90G Grooved Flange, 8.2 GHz to 12.4 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability 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-90 20 dB Waveguide Crossguide Coupler, CPR-90G Grooved Flange, 8.2 GHz to 12.4 GHz PEWCP1059](http://www.pasternack.com/wr90-20db-waveguide-coupler-cpr-90g-grooved-flange-8.2-ghz-to-12.4-ghz-pewcp1059)

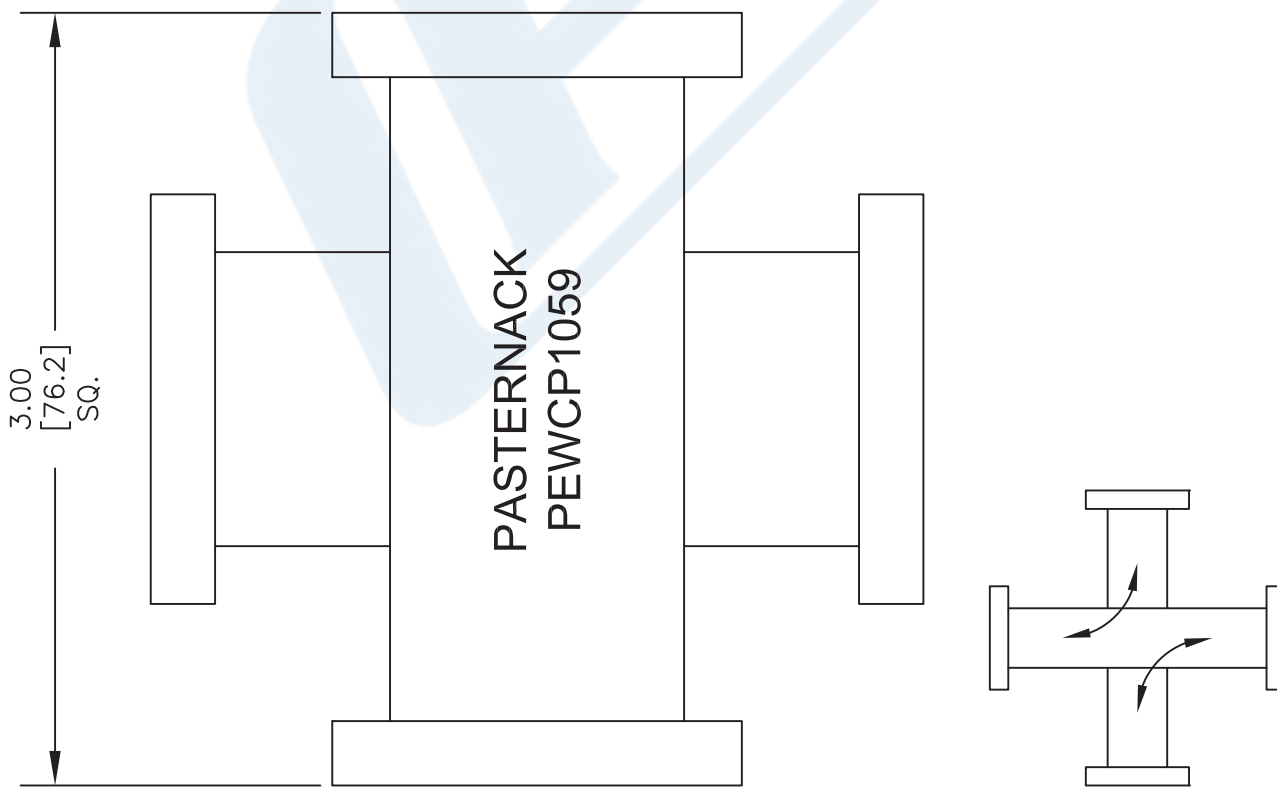
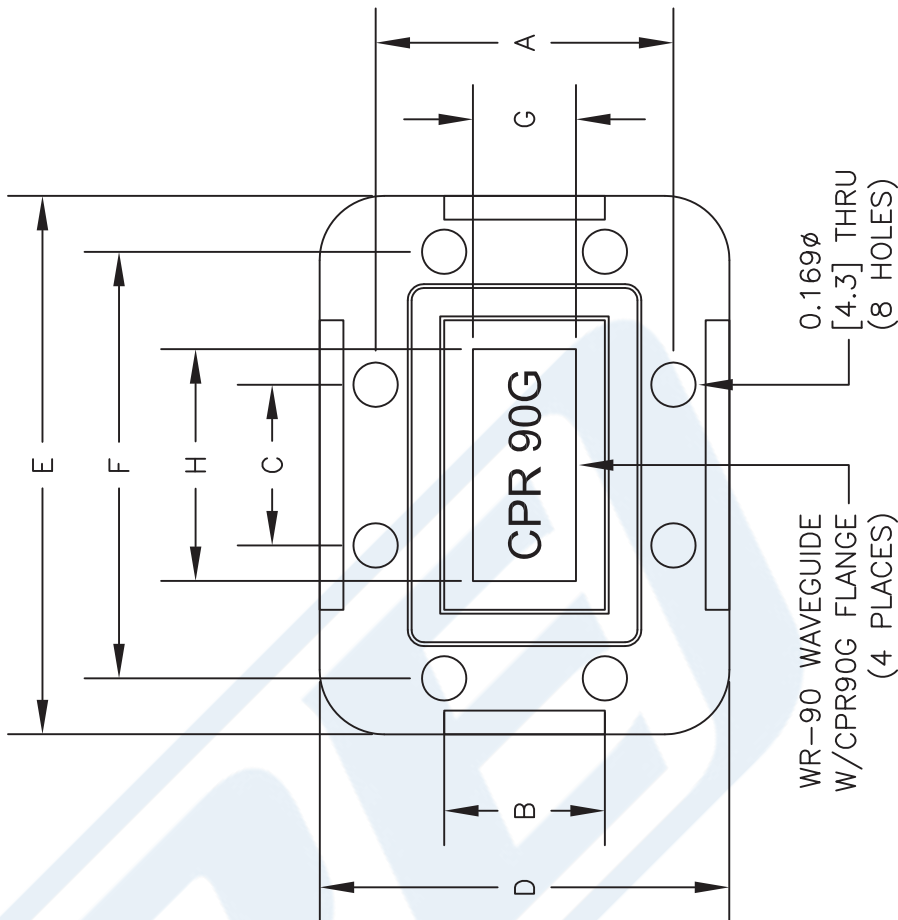
URL: <http://www.pasternack.com/wr90-20db-waveguide-coupler-cpr-90g-crossguide-pewcp1059-p.aspx>

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.

PEWCP1059 CAD Drawing

WR-90 20 dB Waveguide Crossguide Coupler, CPR-90G Grooved Flange, 8.2 GHz to 12.4 GHz

CPR 90G	Dimension	Inches	mm
A		1.156	29.36
B		0.624	15.84
C		0.624	15.84
D		1.590	40.39
E		2.090	53.09
F		1.656	42.06
G		0.400	10.16
H		0.900	22.86



PASTERNACK
PEWCP1059

DWG TITLE

PEWCP1059

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].

FSCM NO. 53919

CAD FILE 050216

SCALE N/A

SIZE A

2233



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