



## WR-112 50 dB Waveguide Crossguide Coupler, CPR-112G Grooved Flange, 7.05 GHz to 10 GHz

### TECHNICAL DATA SHEET

PEWCP1070

The PEWCP1070 is a WR-112 crossguide waveguide coupler that operates in the frequency range of 7.05 to 10 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-112 waveguide coupler uses grooved CPR-112 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
- 50 dB Nominal Coupling Level
- 7.05 GHz to 10 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	7.05		10	GHz
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		50		dB

#### Mechanical Specifications

<b>Size</b>	
Length	4 in [101.6 mm]
Width/Dia.	4 in [101.6 mm]
Weight	1.61 lbs [730.28 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 50 dB Waveguide Crossguide Coupler, CPR-112G Grooved Flange, 7.05 GHz to 10 GHz PEWCP1070](#)





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**Configuration**

Design Crossguide  
Size WR-112

Description	Input Flange	Output Flange	Coupled Flange(s)
Flange Type	CPR-112G	CPR-112G	CPR-112G
Material	Copper Alloy	Copper Alloy	Copper Alloy

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

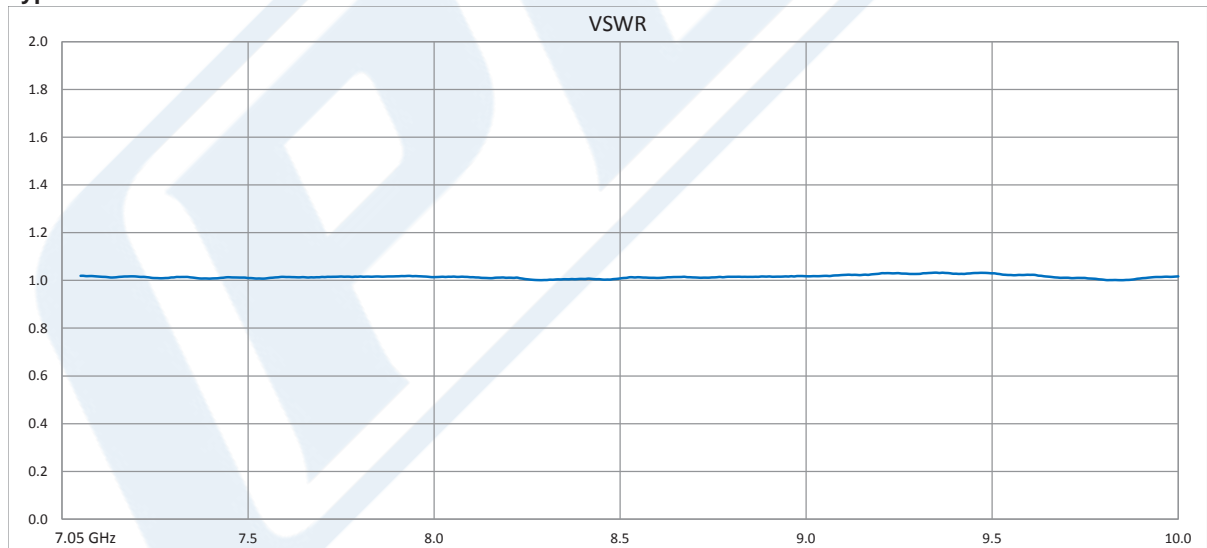
RoHS Compliant  
REACH Compliant 12/17/2015

**Plotted and Other Data**

Notes:

- Values at 25 °C, sea level

**Typical Performance Data**



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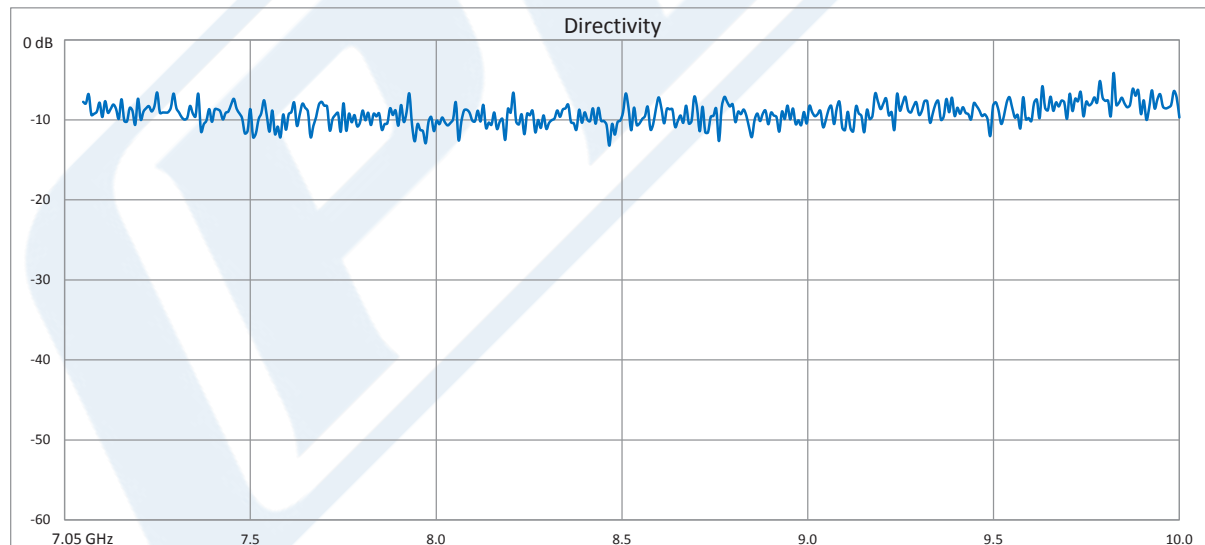
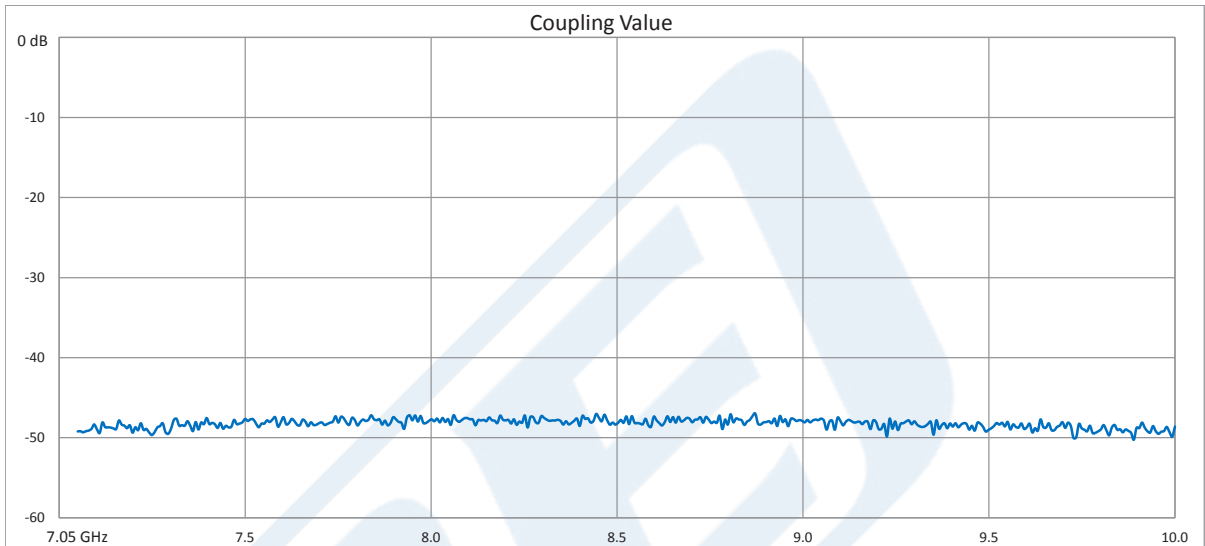




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WR-112 50 dB Waveguide Crossguide Coupler, CPR-112G Grooved Flange, 7.05 GHz to 10 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability 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-112 50 dB Waveguide Crossguide Coupler, CPR-112G Grooved Flange, 7.05 GHz to 10 GHz PEWCP1070](http://www.pasternack.com/wr112-50db-waveguide-coupler-cpr-112g-crossguide-pewcp1070-p.aspx)

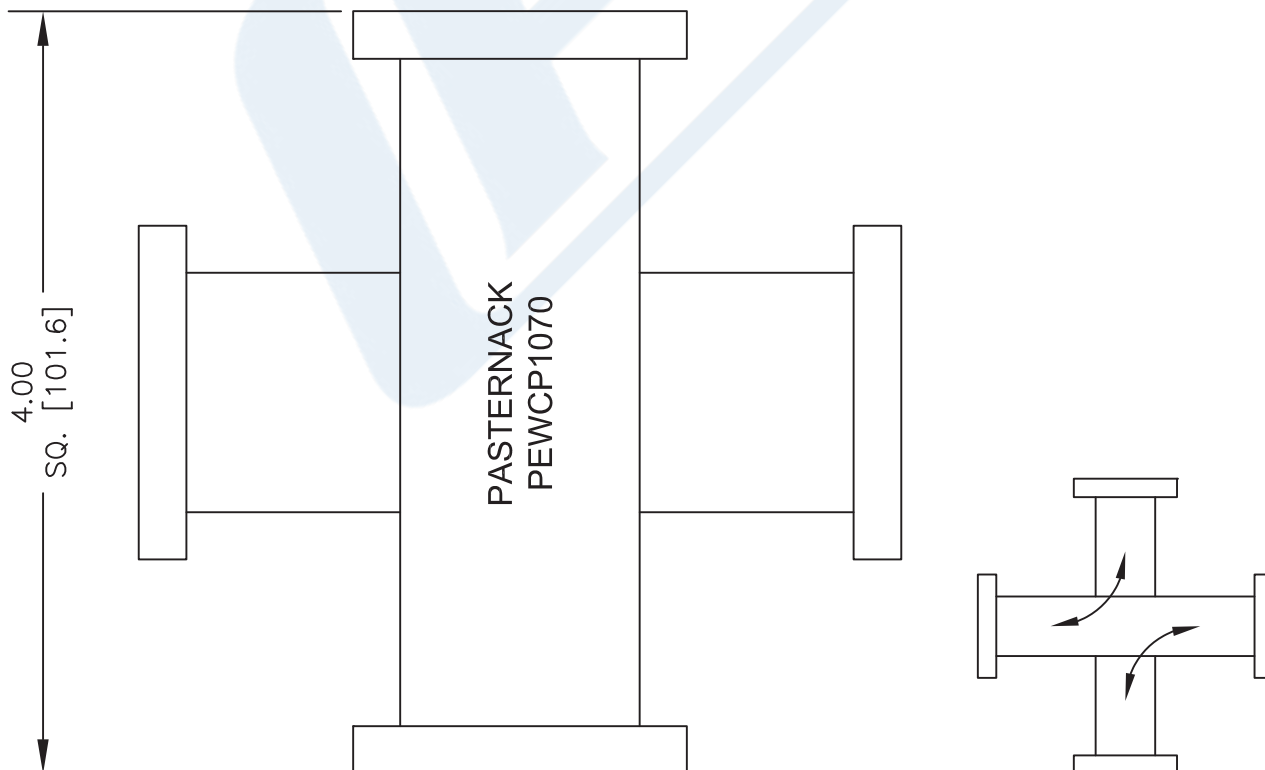
URL: <http://www.pasternack.com/wr112-50db-waveguide-coupler-cpr-112g-crossguide-pewcp1070-p.aspx>

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.

# PEWCP1070 CAD Drawing

WR-112 50 dB Waveguide Crossguide Coupler, CPR-112G Grooved Flange, 7.05 GHz to 10 GHz

CPR 112G	Dimension	Inches	mm
A		0.497	12.62
B		1.122	28.50
C		2.500	63.50
D		1.906	48.41
E		0.750	19.05
F		1.752	44.50
G		0.625	15.88
H		1.280	32.51



<p>NOTES:</p> <ol style="list-style-type: none"> <li>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.</li> <li>ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.</li> <li>DIMENSIONS ARE IN INCHES [mm].</li> </ol>		SCALE N/A	SIZE A	2233
CAD FILE		050216		

DWG TITLE  
**PEWCP1070**  
 FSCM NO. 53919

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