



WR-112 Waveguide 30 dB Crossguide Coupler, UG Cover Flange,
N Female Coupled Port, 6.57 GHz to 9.99 GHz, Aluminum

Waveguide Couplers Technical Data Sheet

PEWCP1083-30

The PEWCP1083-30 is a 30 dB WR-112 three port crossguide coupler with intergrated N Female connector for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Aluminum with UG Cover flanges. The PEWCP1083-30 is part of a family of cross guide couplers offered by Pasternack with coupling values ranging from 20 to 50 dB.

Features

- Three Port Crossguide Waveguide Coupler
- 30±1.5 dB Nominal Coupling Level
- Integrated N Female Connector for the coupled port
- 6.57 GHz to 9.99 GHz Frequency Range
- Low VSWR < 1.25:1

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	6.57		9.99	GHz
Coupler				
Nominal Coupling Level		30		dB
Coupling Accuracy			±1.5	dB
Directivity	18			dB
Insertion Loss		0.1		dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Input Power (CW)			800	Watts
Input Power, Peak			300	kWatts

Mechanical Specifications

Size

- Length 4.724 in [119.99 mm]
- Width 3.228 in [81.99 mm]
- Height 2.79 in [70.87 mm]
- Weight 0.661 lbs [299.82 g]

Interface

- Waveguide Size WR-112

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 Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 6.57 GHz to 9.99 GHz, Aluminum PEWCP1083-30](#)



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Flange Type	UG Cover
RF Connector Type	N Female
Coupler Body Material and Plating	Aluminum, Chromate

Environmental Specifications

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

WR-112 Waveguide 30 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 6.57 GHz to 9.99 GHz, Aluminum 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-112 Waveguide 30 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 6.57 GHz to 9.99 GHz, Aluminum PEWCP1083-30](#)

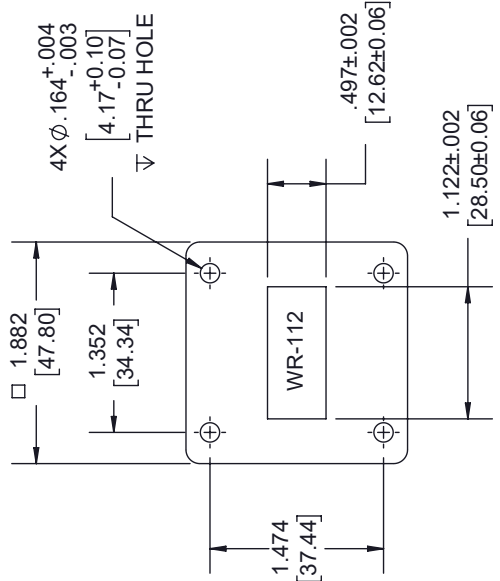
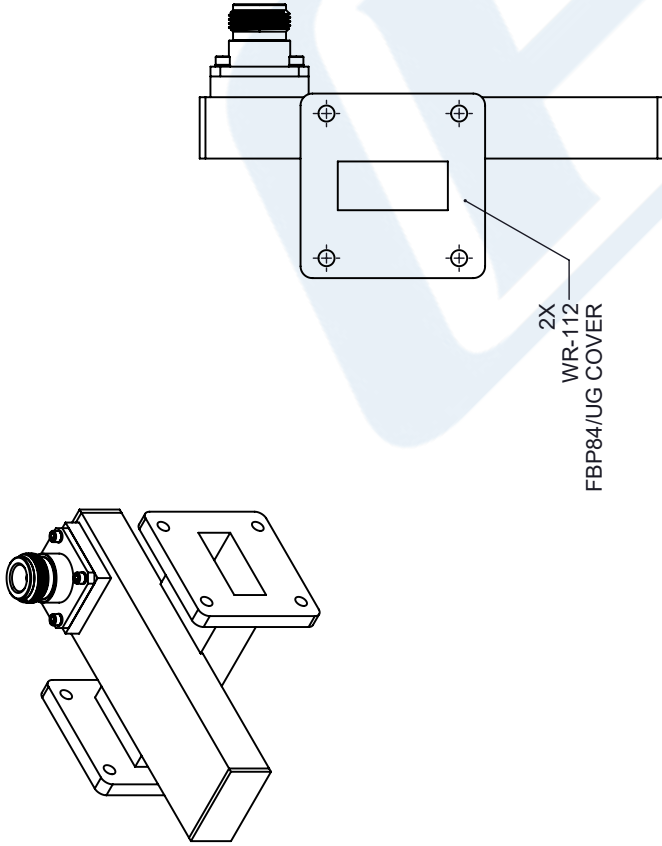
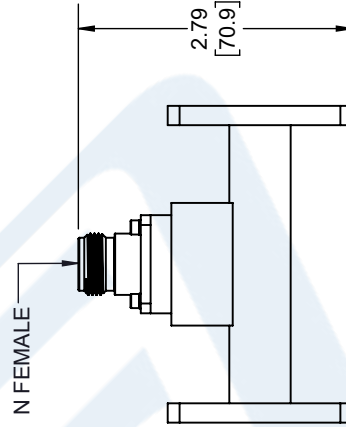
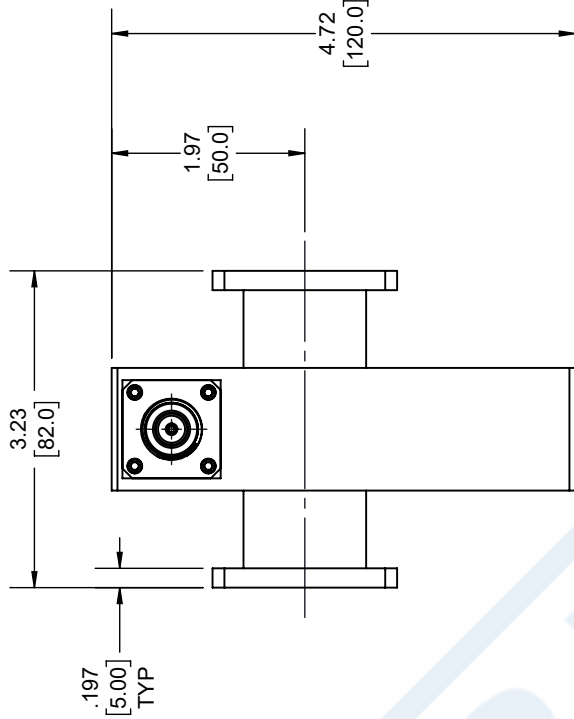
URL: <https://www.pasternack.com/30-db-wr-112-waveguide-crossguide-coupler-pewcp1083-30-p.aspx>

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.

PEWCP1083-30 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/7/2022	S. PONG



FLANGE DETAIL

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]

CABLE LENGTH (L), TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

REV A

ITEM NO. PEWCP1083-30

DRAWN BY K.DANG

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