



WR-22 Waveguide 20 dB Broadwall Coupler, UG-383/U Round Cover Flange, E-Plane Coupled Port, 33 GHz to 50 GHz, Brass Copper

Waveguide Couplers Technical Data Sheet

PEW22CP010-20

The PEW22CP010-20 is a millimeter-wave directional waveguide coupler that operates in the frequency range of 33 to 50 GHz (Q Band). This Q band component offers a nominal coupling level of 20 dB, mean coupling accuracy of ± 1 , coupling flatness of 1.2 dB, and has a maximum VSWR level of 1.2:1. The design is made of gold brass copper and incorporates a multi-hole configuration that results in typical directivity of 30 dB. Common applications for this millimeter wave component involve test setups where power reflection measurements are required that might involve power sampling and frequency monitoring with minimal signal loss to the main transmission path. This E plane coupler uses integrated WR-22 waveguide ports with UG 383/U flanges. Pasternack offers a complete family of waveguide millimeter wave directional couplers that are in-stock for same day shipment.

Features

- 20 dB Nominal Coupling Level
- E-Plane Waveguide Coupler
- 33 GHz to 50 GHz Frequency Range
- Body and Flanges made of Brass Copper
- Gold Waveguide
- 1.2:1 VSWR

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy			± 1	dB
Directivity		30		dB
Insertion Loss			0.8	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.3:1	
Coupling Flatness			± 1.2	dB

Mechanical Specifications

Size

Length	6.7 in [170.18 mm]
Width	1.125 in [28.58 mm]
Height	1.8 in [45.72 mm]
Weight	0.22 lbs [99.79 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Waveguide 20 dB Broadwall Coupler, UG-383/U Round Cover Flange, E-Plane Coupled Port, 33 GHz to 50 GHz, Brass Copper PEW22CP010-20](#)

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Interface

Waveguide Size	WR-22
Flange Type	Round Cover
Flange Designation	UG-383/U
Flange Material and Plating	Brass Copper, Gold
Coupler Body Material and Plating	Brass Copper, Gold

Environmental Specifications

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

Plotted and Other Data

Notes:

WR-22 Waveguide 20 dB Broadwall Coupler, UG-383/U Round Cover Flange, E-Plane Coupled Port, 33 GHz to 50 GHz, Brass 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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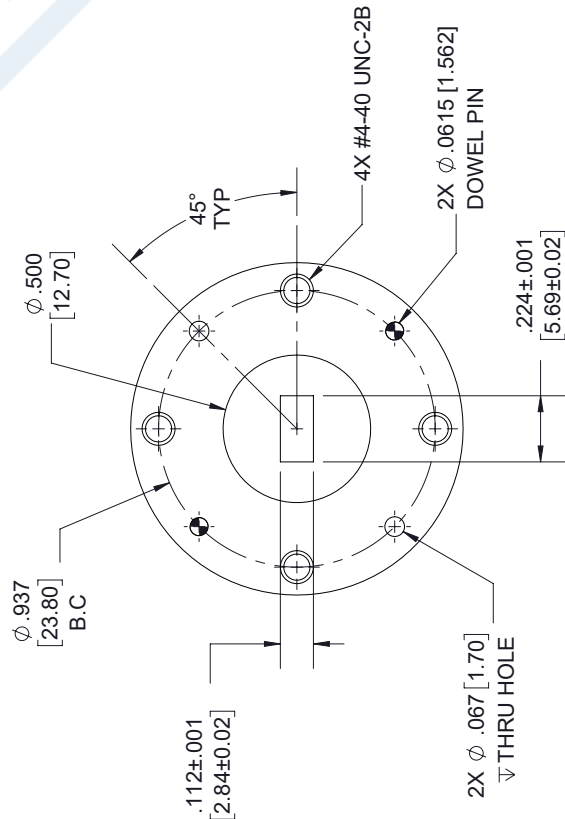
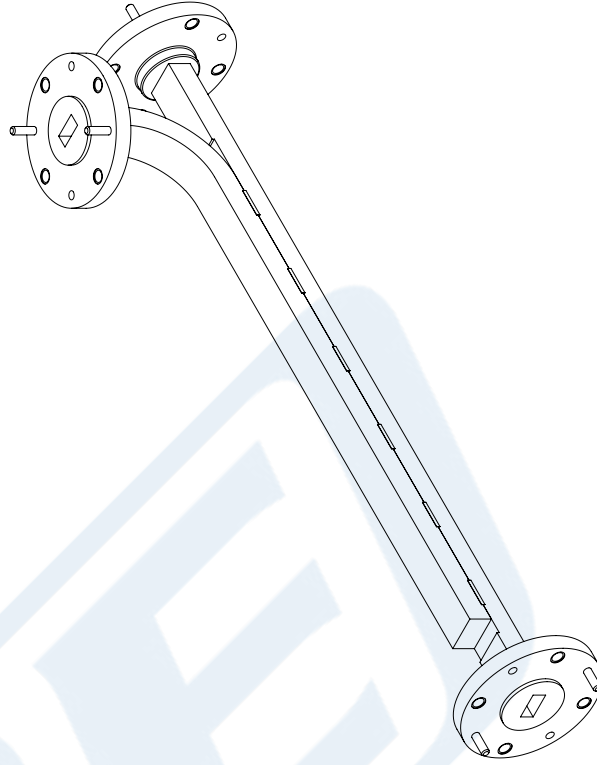
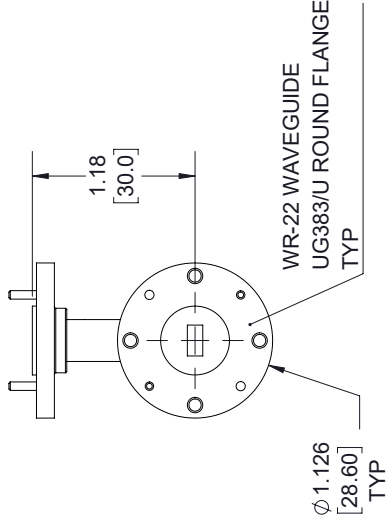
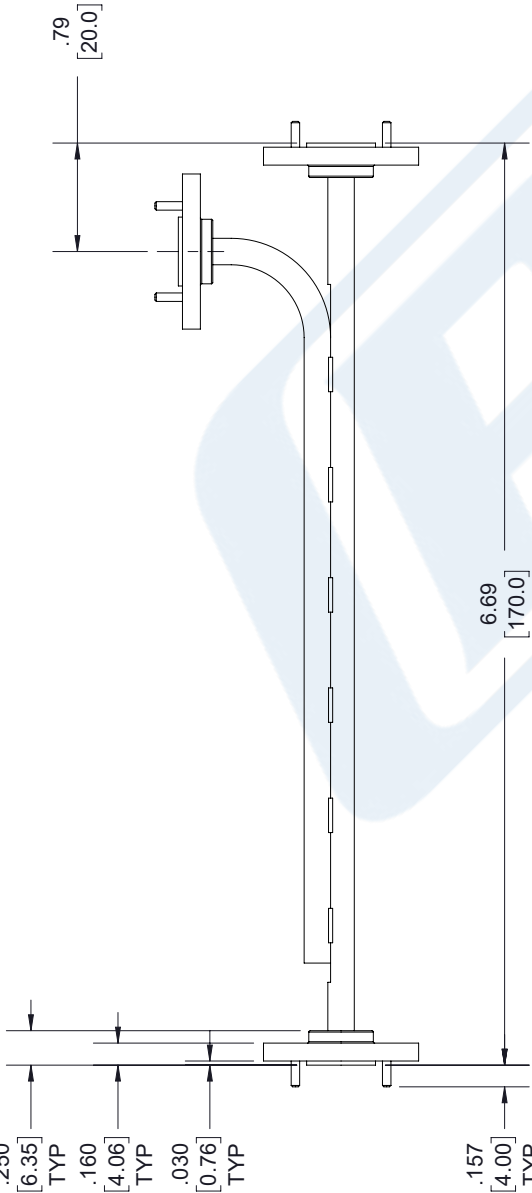
URL: <https://www.pasternack.com/wr22-waveguide-20db-broadwall-coupler-ug383-round-e-50ghz-pew22cp010-20-p.aspx>

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PEW22CP010-20 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	07/03/19	S.PONG



FLANGE DETAIL

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

TOLERANCES:

X±.2	[5.08]	FRACTIONS
.XX±.01	[.25]	±.132
.XXX±.005	[.13]	ANGLES ± 1°

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



Pasternack Enterprises, Inc.
 P.O. Box 16759, Irvine, CA 92623.
 Phone: 1.949.261.1920 | 1.866.727.8376
 Fax: 1.949.261.7451
 www.pasternack.com | e-mail: sales@pasternack.com

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SHEET 1 OF 1
 SCALE N/A

SIZE	CAGE	DRAWN BY	PART NUMBER	REV
A	53919	K.DANG	PEW22CP010-20	A

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