



WR-15 Waveguide 20 dB Broadwall Coupler, UG-385/U Round Cover Flange, E-Plane Coupled Port, 50 GHz to 75 GHz, Brass Copper

Waveguide Couplers Technical Data Sheet

PEWCP1080-20

The PEWCP1080-20 is a millimeter-wave directional waveguide coupler that operates in the frequency range of 50 to 75 GHz (V Band). This V band component offers a nominal coupling level of 20 dB, mean coupling accuracy of +/- 1, coupling flatness of 1.5 dB, and has a maximum VSWR level of 1.1:1. The design is made of gold brass copper and incorporates a multi-hole configuration that results in typical directivity of 40 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-15 waveguide ports with UG 385/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
- 50 GHz to 75 GHz Frequency Range
- Body and Flanges made of Brass Copper
- Gold Waveguide
- 1.1:1 VSWR

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	50		75	GHz
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy			±1	dB
Directivity		40		dB
Insertion Loss			1	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.15:1	
Coupling Flatness			±1.5	dB

Mechanical Specifications

Size

Length	6 in [152.4 mm]
Width	0.75 in [19.05 mm]
Height	1.375 in [34.93 mm]
Weight	0.31 lbs [140.61 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-15 Waveguide 20 dB Broadwall Coupler, UG-385/U Round Cover Flange, E-Plane Coupled Port, 50 GHz to 75 GHz, Brass Copper PEWCP1080-20](#)



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Interface

Waveguide Size	WR-15
Flange Type	Round Cover
Flange Designation	UG-385/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-15 Waveguide 20 dB Broadwall Coupler, UG-385/U Round Cover Flange, E-Plane Coupled Port, 50 GHz to 75 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-15 Waveguide 20 dB Broadwall Coupler, UG-385/U Round Cover Flange, E-Plane Coupled Port, 50 GHz to 75 GHz, Brass Copper PEWCP1080-20](#)

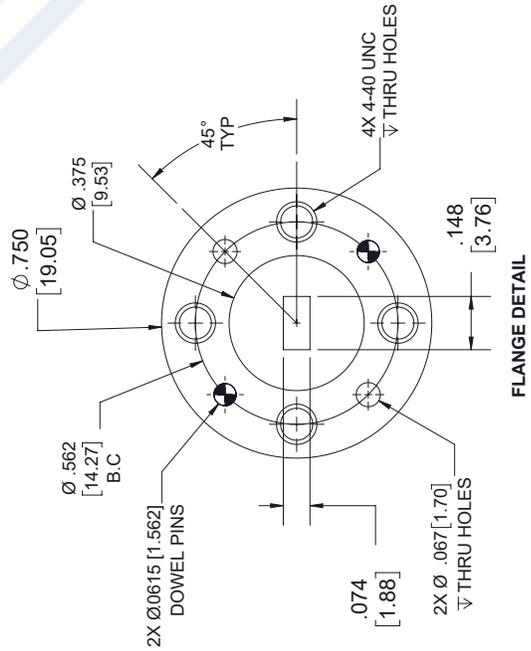
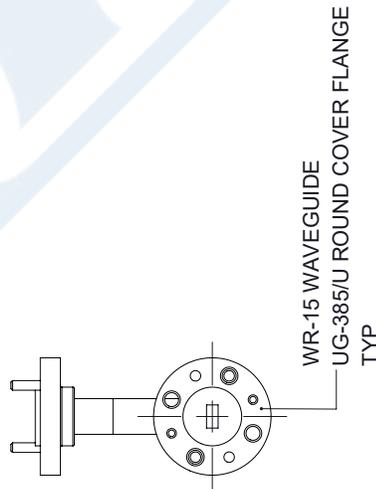
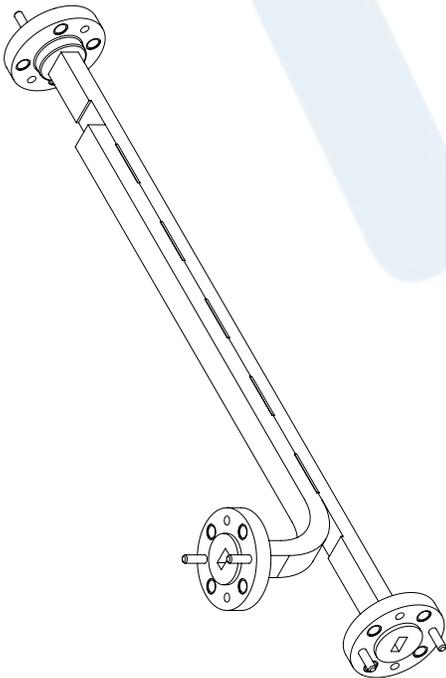
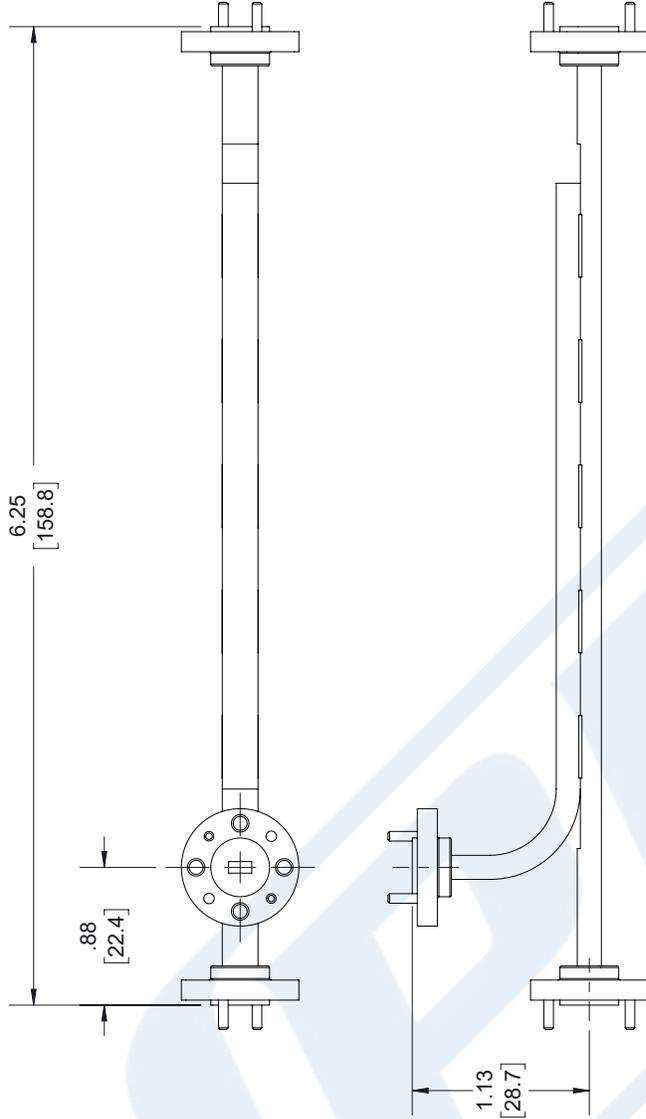
URL: <https://www.pasternack.com/wr15-waveguide-20db-broadwall-coupler-ug385-round-e-75ghz-pewcp1080-20-p.aspx>

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PEWCP1080-20 CAD Drawing

WR-15 Waveguide 20 dB Broadwall Coupler, UG-385/U Round Cover Flange, E-Plane Coupled Port, 50 GHz to 75 GHz, Brass Copper

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/9/2020	S. PONG



LABEL:
PASTERNAK
PEWCP1080-20
D/C: YYWW

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

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

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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