

WR-28 Waveguide 20 dB Broadwall Coupler, UG-599/U Square Cover Flange, E-Plane Coupled Port, 26.5 GHz to 40 GHz, Brass Copper



## Waveguide Couplers Technical Data Sheet

PEW28CP010-20

The PEW28CP010-20 is a millimeter-wave directional waveguide coupler that operates in the frequency range of 26.5 to 40 GHz (Ka Band). This Ka band component offers a nominal coupling level of 20 dB, mean coupling accuracy of  $\pm 0.8$ , coupling flatness of 1 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-28 waveguide ports with UG 599/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
- 26.5 GHz to 40 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	26.5		40	GHz
<b>Coupler</b>				
Nominal Coupling Level		20		dB
Coupling Accuracy			$\pm 0.8$	dB
Directivity		30		dB
Insertion Loss			0.6	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.2:1	
Coupling Flatness			$\pm 1$	dB

### Mechanical Specifications

#### Size

Length	7 in [177.8 mm]
Width	0.75 in [19.05 mm]
Height	1.55 in [39.37 mm]
Weight	0.176 lbs [79.83 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Waveguide 20 dB Broadwall Coupler, UG-599/U Square Cover Flange, E-Plane Coupled Port, 26.5 GHz to 40 GHz, Brass Copper PEW28CP010-20](#)

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### Interface

Waveguide Size	WR-28
Flange Type	Square Cover
Flange Designation	UG-599/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-28 Waveguide 20 dB Broadwall Coupler, UG-599/U Square Cover Flange, E-Plane Coupled Port, 26.5 GHz to 40 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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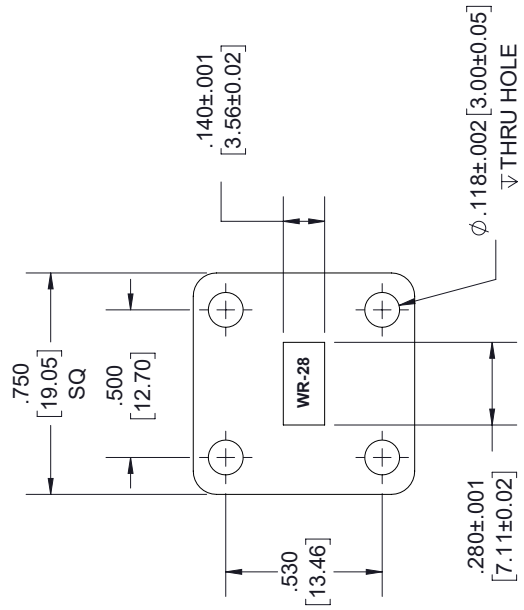
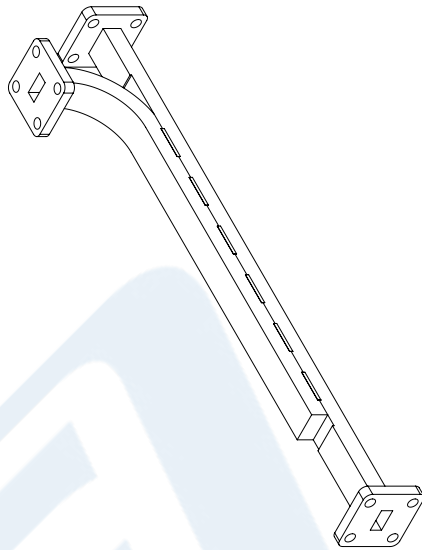
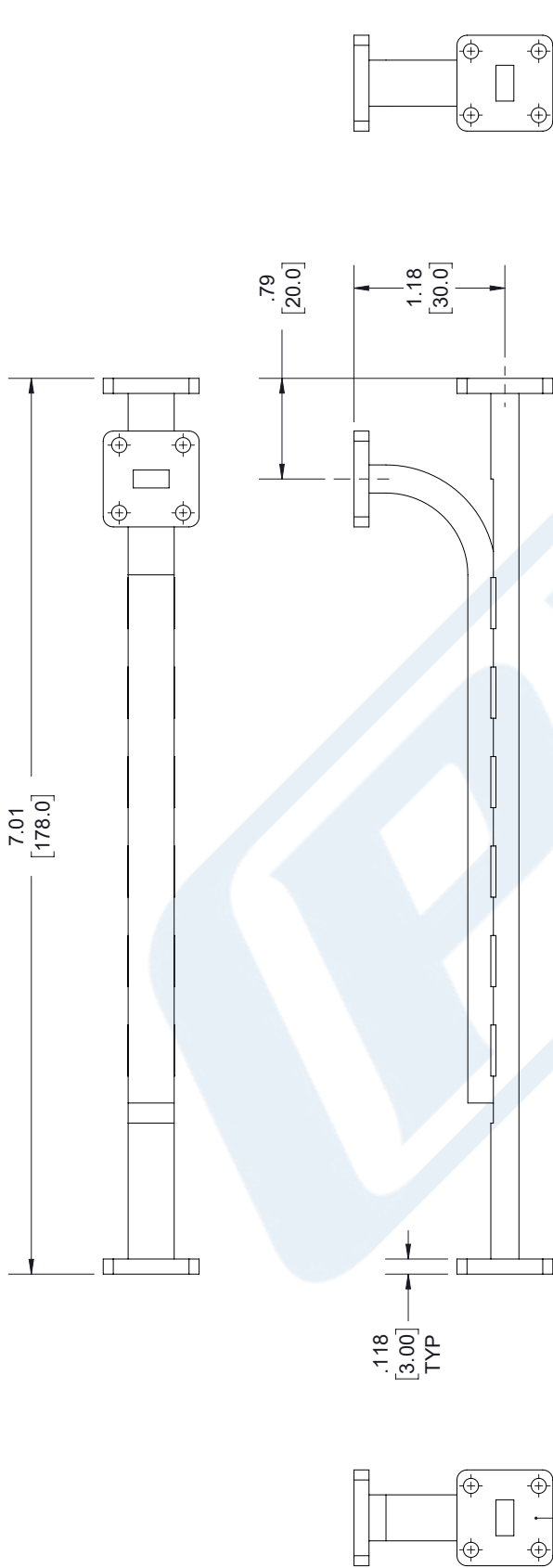
URL: <https://www.pasternack.com/wr28-waveguide-20db-broadwall-coupler-ug599-square-e-40ghz-pew28cp010-20-p.aspx>

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# PEW28CP010-20 CAD Drawing

WR-28 Waveguide 20 dB Broadwall Coupler, UG-599/U Square Cover  
Flange, E-Plane Coupled Port, 26.5 GHz to 40 GHz, Brass Copper

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

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an INFINITO brand

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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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