



WR-10 Waveguide 20 dB Broadwall Coupler, UG-387/U Round Cover Flange, E-Plane Coupled Port, 75 GHz to 110 GHz, Oxygen Free Hard Copper

Waveguide Couplers Technical Data Sheet

PEW10CP010-20

The PEW10CP010-20 is a millimeter-wave directional waveguide coupler that operates in the frequency range of 75 to 110 GHz (W Band). This W band component offers a nominal coupling level of 20 dB, mean coupling accuracy of ± 1.5 dB, coupling flatness of ± 1.0 dB, and has a maximum VSWR level of 1.17:1. 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-10 waveguide ports with UG-387/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
- 75 GHz to 110 GHz Frequency Range
- Body and Flanges made of Brass Copper
- Gold Plated Waveguide
- 1.17:1 VSWR

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	75		110	GHz
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy			± 1.5	dB
Directivity		40		dB
Main Line VSWR		1.1:1		
Secondary Line VSWR			1.17:1	
Coupling Flatness			± 1	dB

Mechanical Specifications

Weight	0.312 lbs [141.52 g]
Interface	
Waveguide Size	WR-10
Flange Type	Round Cover
Flange Designation	UG-387/U
Flange Material and Plating	Brass, Gold
Coupler Body Material and Plating	Oxygen Free Hard Copper, Gold

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-10 Waveguide 20 dB Broadwall Coupler, UG-387/U Round Cover Flange, E-Plane Coupled Port, 75 GHz to 110 GHz, Oxygen Free Hard Copper PEW10CP010-20](#)



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Environmental Specifications

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

Plotted and Other Data

Notes:

WR-10 Waveguide 20 dB Broadwall Coupler, UG-387/U Round Cover Flange, E-Plane Coupled Port, 75 GHz to 110 GHz, Oxygen Free Hard 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/wr10-waveguide-20db-broadwall-coupler-ug387-round-e-110ghz-pew10cp010-20-p.aspx>

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PEW10CP010-20 CAD Drawing

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