

WR-90 Waveguide 10 dB Broadwall Coupler, UG-39/U Square Cover Flange, E-Plane Coupled Port, 8.2 GHz to 12.4 GHz, Copper Alloy

Waveguide Couplers Technical Data Sheet

PEWCP1017

The PEWCP1017 is a WR-90 Directional Broadwall waveguide coupler that operates in the frequency range of 8.2 to 12.4 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 20, or 30 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Pasternack offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

Features

- Broadwall Waveguide Coupler
- 10 dB Nominal Coupling Level
- 8.2 GHz to 12.4 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

Applications

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
Coupler				
Nominal Coupling Level		10		dB
Directivity		40		dB
Insertion Loss		0.15		dB
Main Line VSWR		1.05:1		

Mechanical Specifications

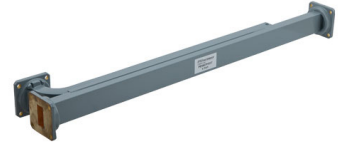
Size

Length	16.68 in [423.67 mm]
Width	1.625 in [41.28 mm]
Height	2.742 in [69.65 mm]
Weight	1.76 lbs [798.32 g]

Interface

Waveguide Size	WR-90
Flange Type	Square Cover
Flange Designation	UG-39/U
Flange Material and Plating	Copper Alloy

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Waveguide 10 dB Broadwall Coupler, UG-39/U Square Cover Flange, E-Plane Coupled Port, 8.2 GHz to 12.4 GHz, Copper Alloy PEWCP1017](#)



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Coupler Body Material and Plating

Copper Alloy

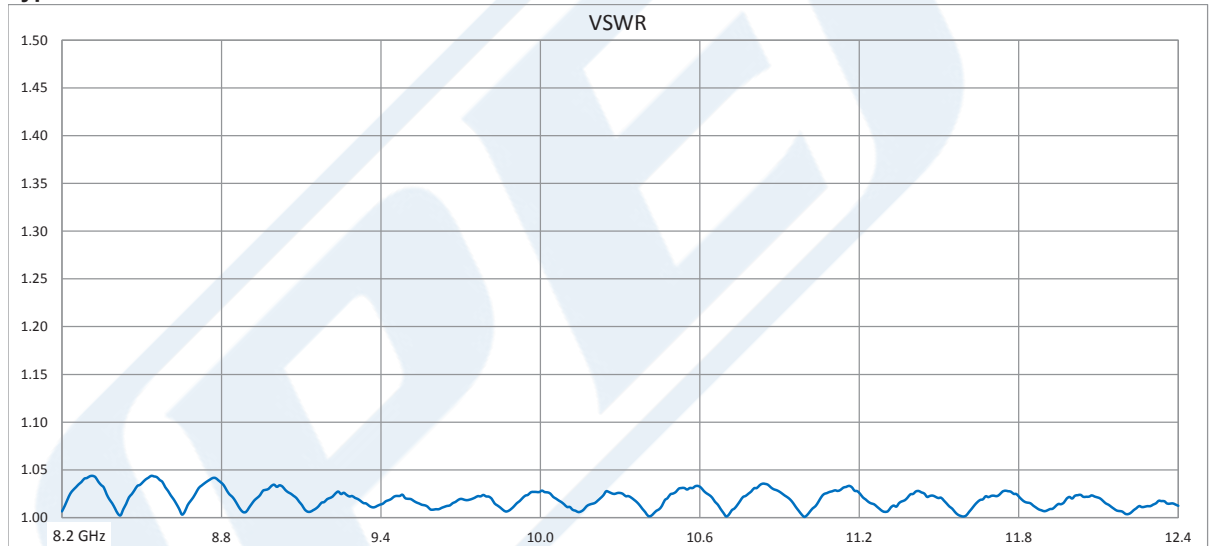
Environmental Specifications

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

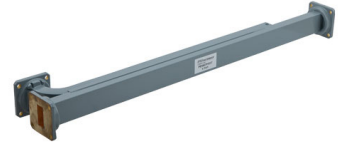
Plotted and Other Data

Notes:

Typical Performance Data



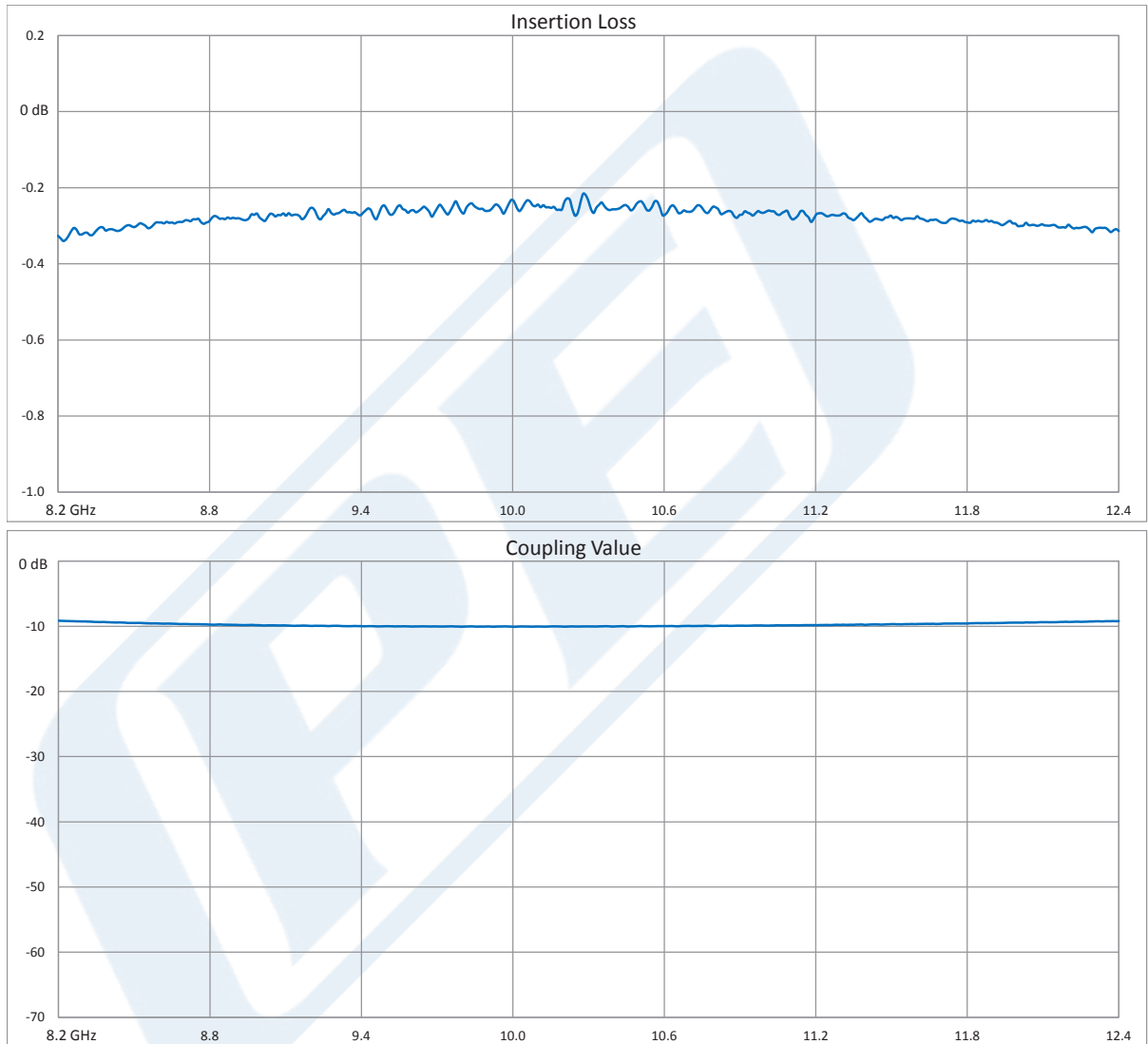
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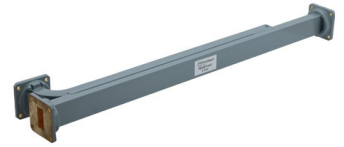
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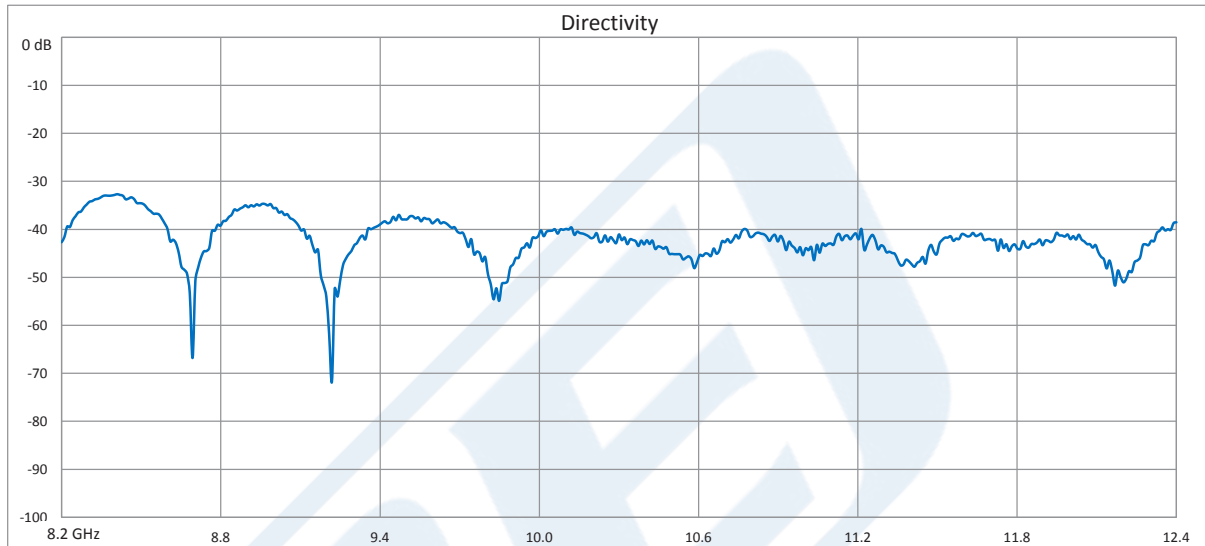
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WR-90 Waveguide 10 dB Broadwall Coupler, UG-39/U Square Cover Flange, E-Plane Coupled Port, 8.2 GHz to 12.4 GHz, Copper Alloy from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

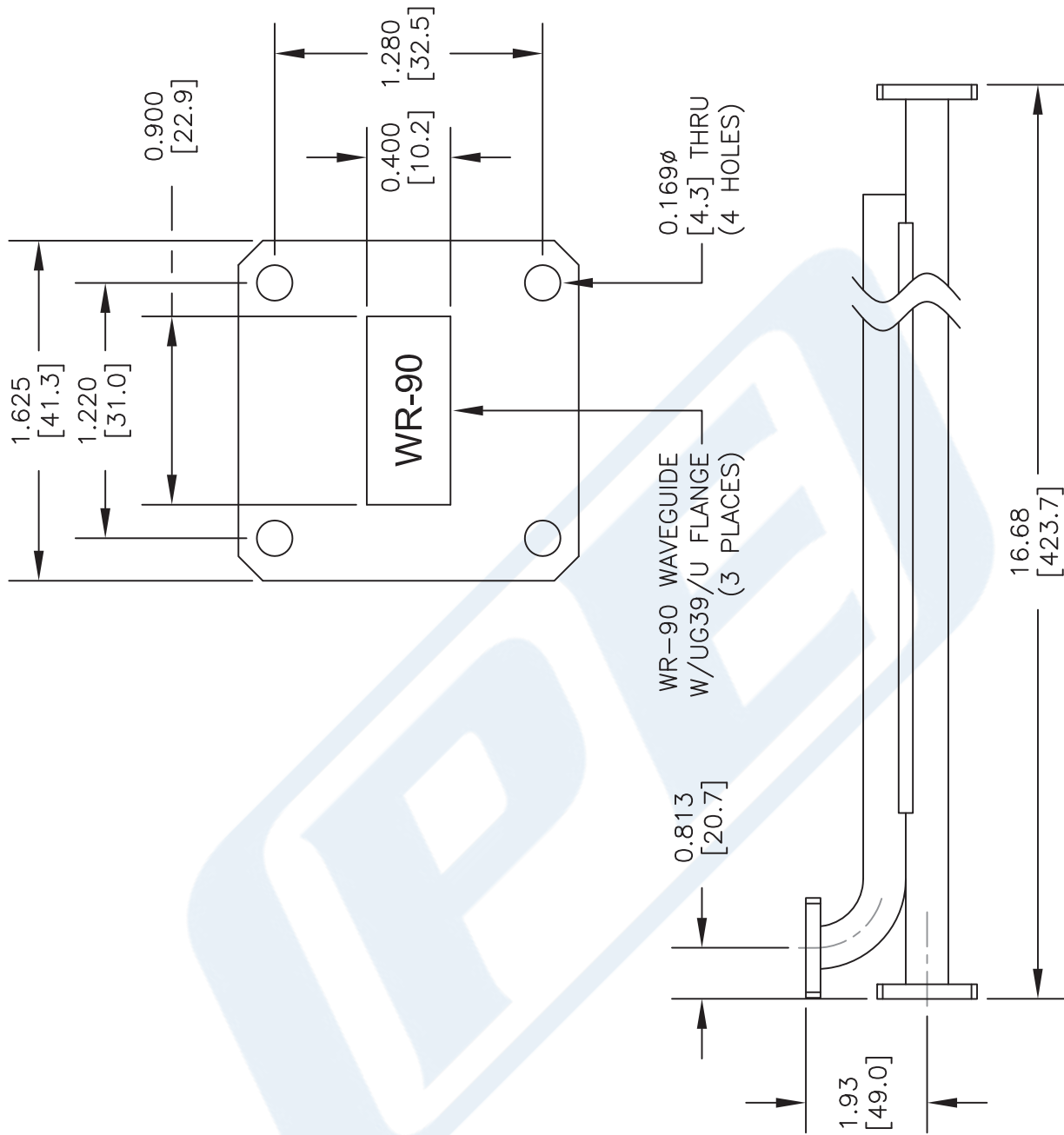
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PEWC1017 CAD Drawing

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
 DECIMALS ±0.030
 ANGLES ±1/2 DEG.
 FRACTIONS ±1/32
 .XX ±.015
 .XXX ±.005

* THESE DIMENSIONS AND TOLERANCES SUPPERSEDE NOTE #1 ON TITLE BLOCK.

NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
PEWC1017

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FSCM NO. 53919

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