



WR-42 50 dB Waveguide Crossguide Coupler, UG-595/U Square Cover Flange, 18 GHz to 26.5 GHz

TECHNICAL DATA SHEET

PEWCP1042

The PEWCP1042 is a WR-42 crossguide waveguide coupler that operates in the frequency range of 18 to 26.5 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a cross wall configuration that result in a mid-band nominal coupling value of 20, 30, 40 or 50 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. This WR-42 waveguide coupler uses standard UG-595/U square cover flanges. Pasternack offers a complete family of waveguide Crossguide and Top wall couplers that are in-stock and ship same day.

Features

- Crossguide Waveguide Coupler
- 50 dB Nominal Coupling Level
- 18 GHz to 26.5 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 (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		50		dB

Mechanical Specifications

Size	
Length	2.5 in [63.5 mm]
Width/Dia.	2.5 in [63.5 mm]
Weight	0.25 lbs [113.4 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 50 dB Waveguide Crossguide Coupler, UG-595/U Square Cover Flange, 18 GHz to 26.5 GHz PEWCP1042](#)



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Configuration

Design Crossguide
Size WR-42

Description	Input Flange	Output Flange	Coupled Flange(s)
Flange Type	Square Cover	Square Cover	Square Cover
Flange Designation	UG-595/U	UG-595/U	UG-595/U
Material	Copper Alloy	Copper Alloy	Copper Alloy

Compliance Certifications (visit www.Pasternack.com for current document)

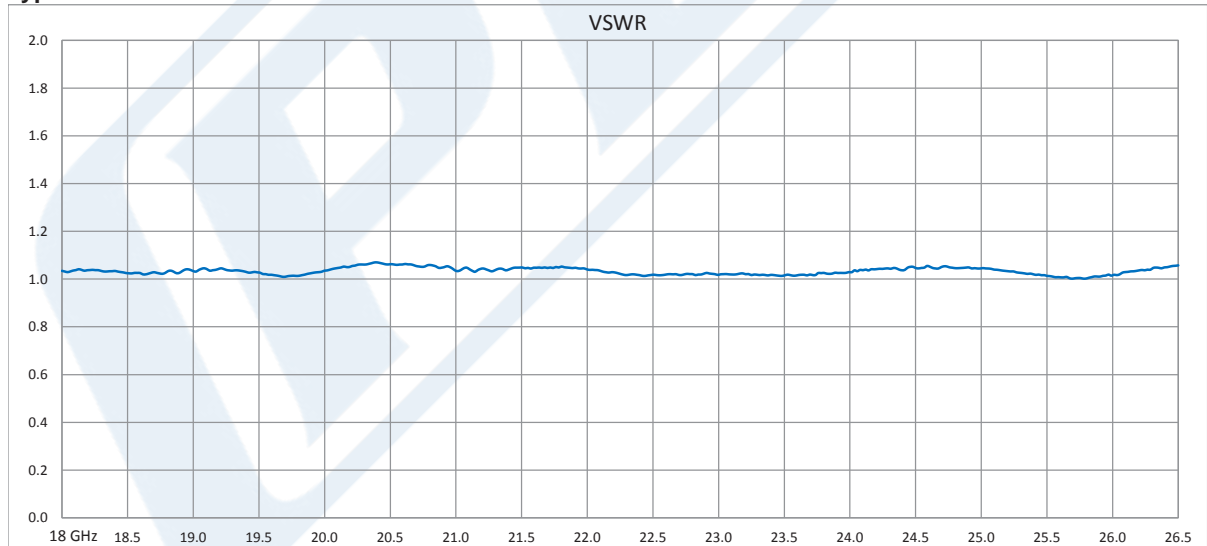
RoHS Compliant
REACH Compliant 12/17/2015

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



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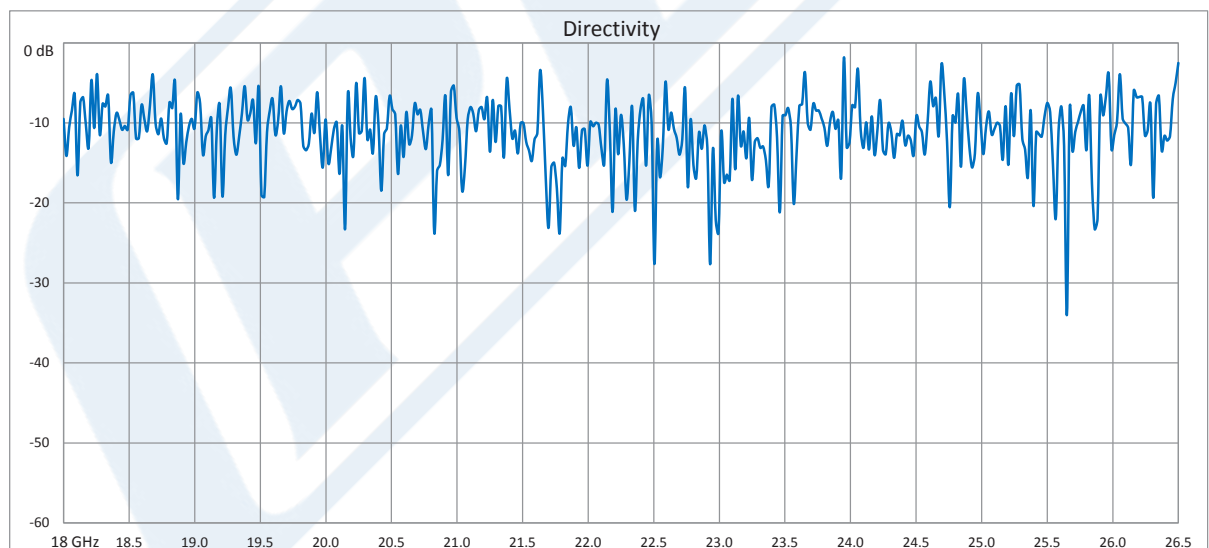
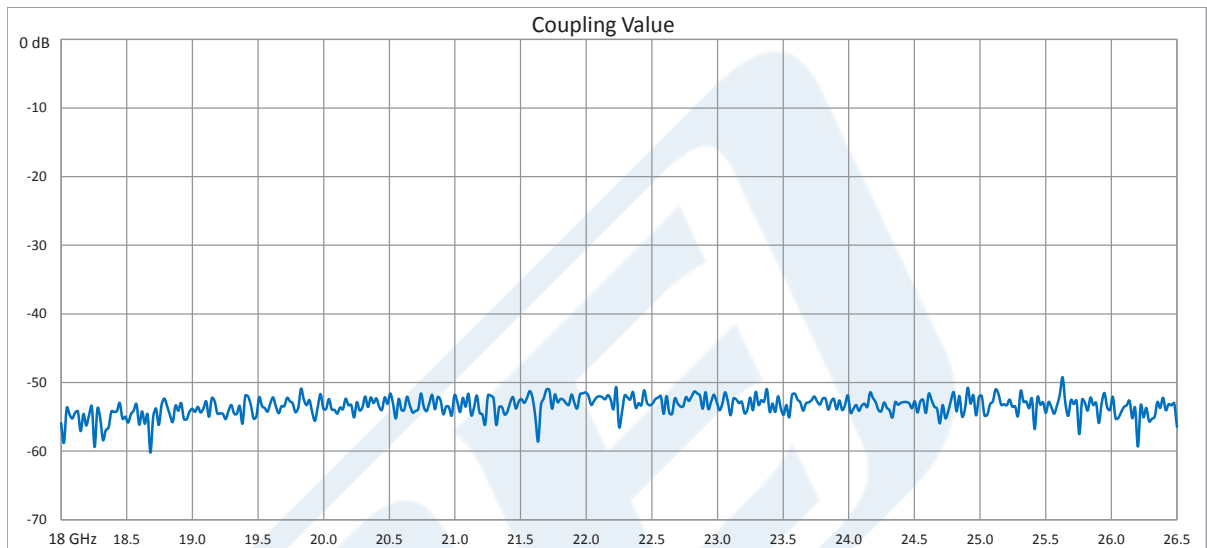




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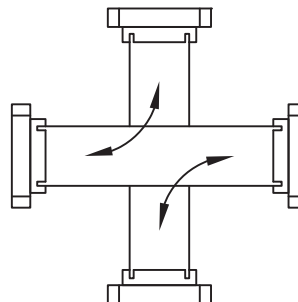
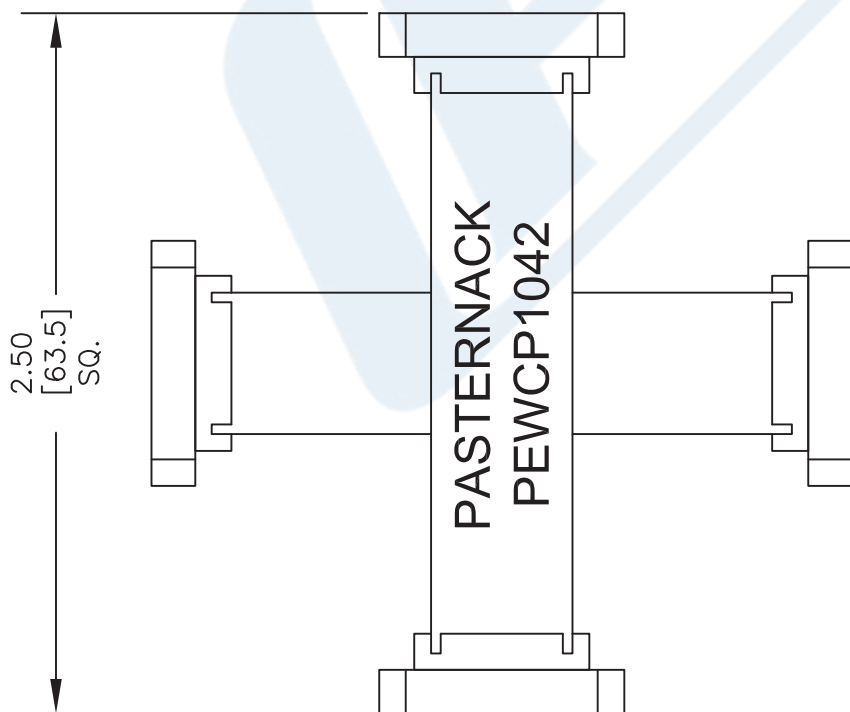
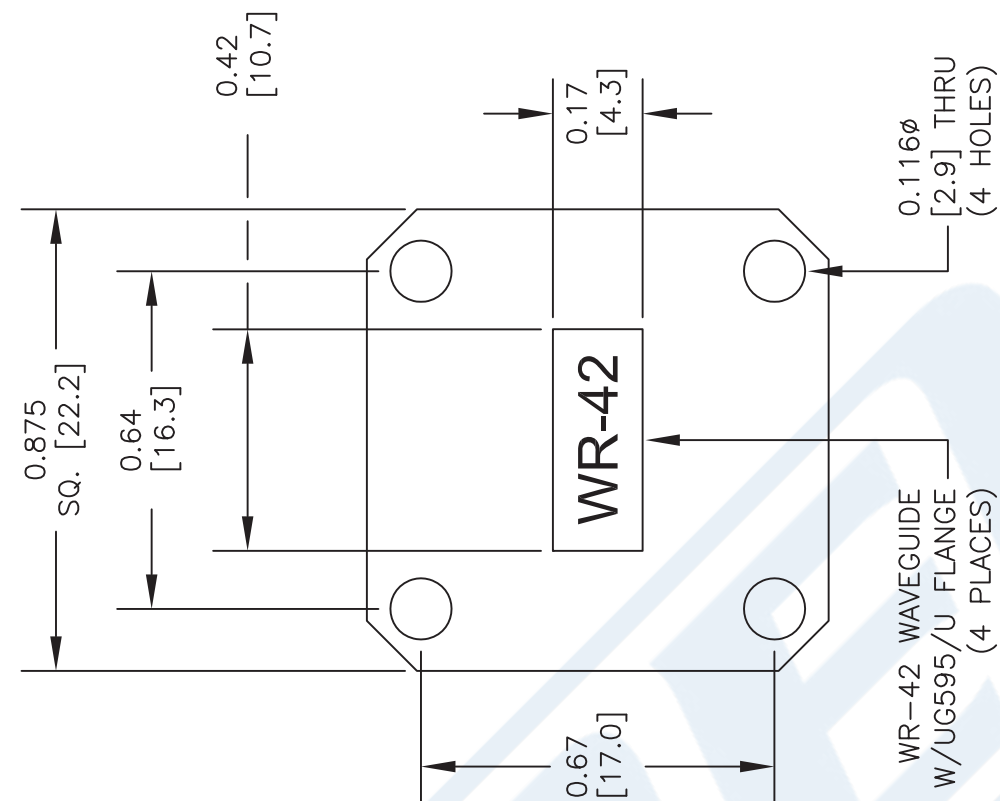
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PEWCP1042 CAD Drawing

WR-42 50 dB Waveguide Crossguide Coupler, UG-595/U

Square Cover Flange, 18 GHz to 26.5 GHz



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
PEWCP1042

FSCM NO. 53919

CAD FILE 042916

SCALE N/A

SIZE A

2233

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Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com