

#### **TECHNICAL DATA SHEET**

The PEWCP1047 is a WR-62 crossguide waveguide coupler that operates in the frequency range of 12.4 to 18 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-62 waveguide coupler uses standard UG-419/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
- 20 dB Nominal Coupling Level
- 12.4 GHz to 18 GHz Frequency Range

#### Applications

- Test Benches
- Radar
- Satellite

- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

Body and Flanges made of Copper Alloy

Low VSWR

**Electrical Specifications** (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	12.4		18	GHz
Directivity		20		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		20		dB

#### **Mechanical Specifications**

2.5 in [63.5 mm]
2.5 in [63.5 mm]
0.6 lbs [272.16 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-62 20 dB Waveguide Crossguide Coupler, UG-419/U Square Cover Flange, 12.4 GHz to 18 GHz PEWCP1047

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com



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Design Size		Crossguide WR-62		
Description	Input Flange	Output Flange	Coupled Flange(s)	
Flange Type	Square Cover	Square Cover	Square Cover	
Flange Designation	UG-419/U	UG-419/U	UG-419/U	
Material	Copper Alloy Copper Alloy		Copper Alloy	
npliance Certifications (visi RoHS Compliant REACH Compliant tted and Other Data Notes:		12/17/2015		
• Values at 25 °C, sea level				
Typical Performance Data	VSW			
2.0	V S V V	R III		
1.8				
1.8				
1.6				
1.6 1.4 1.2				
1.6 1.4 1.2 1.0				
1.6 1.4 1.2				
1.6 1.4 1.2 1.0				

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#### **Coupling Value** 0 dB -10 -20 -30 -40 -50 -60 -70 12.4 GHz 12.8 13.2 13.6 14.0 14.4 14.8 15.2 15.6 16.0 16.4 16.8 17.2 17.6 18.0 Directivity 0 dB -10 -20 -30 -40 -50 -60 12.4 GHz 12.8 13.2 13.6 14.0 14.4 14.8 15.2 15.6 16.0 16.4 16.8 17.2 17.6 18.0

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WR-62 20 dB Waveguide Crossguide Coupler, UG-419/U Square Cover Flange, 12.4 GHz to 18 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/wr62-20db-waveguide-coupler-ug419-square-crossguide-pewcp1047-p.aspx

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.

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# PEWCP1047 CAD Drawing

WR-62 20 dB Waveguide Crossguide Coupler, UG-419/U Square Cover Flange, 12.4 GHz to 18 GHz

