



WR-51 20 dB Waveguide Crossguide Coupler, Square Cover Flange, 15 GHz to 22 GHz

TECHNICAL DATA SHEET

PEWCP1043

The PEWCP1043 is a WR-51 crossguide waveguide coupler that operates in the frequency range of 15 to 22 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-51 waveguide coupler uses standard 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
- 15 GHz to 22 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	15		22	GHz
Directivity		20		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		20		dB

Mechanical Specifications

Size

Length

2.5 in [63.5 mm]

Width/Dia.

2.5 in [63.5 mm]

Weight

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-51 20 dB Waveguide Crossguide Coupler, Square Cover Flange, 15 GHz to 22 GHz PEWCP1043](#)



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Configuration

Design
Size

Crossguide
WR-51

Description	Input Flange	Output Flange	Coupled Flange(s)
Flange Type	Square Cover	Square Cover	Square Cover
Material	Copper Alloy	Copper Alloy	Copper Alloy

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

RoHS Compliant

REACH Compliant

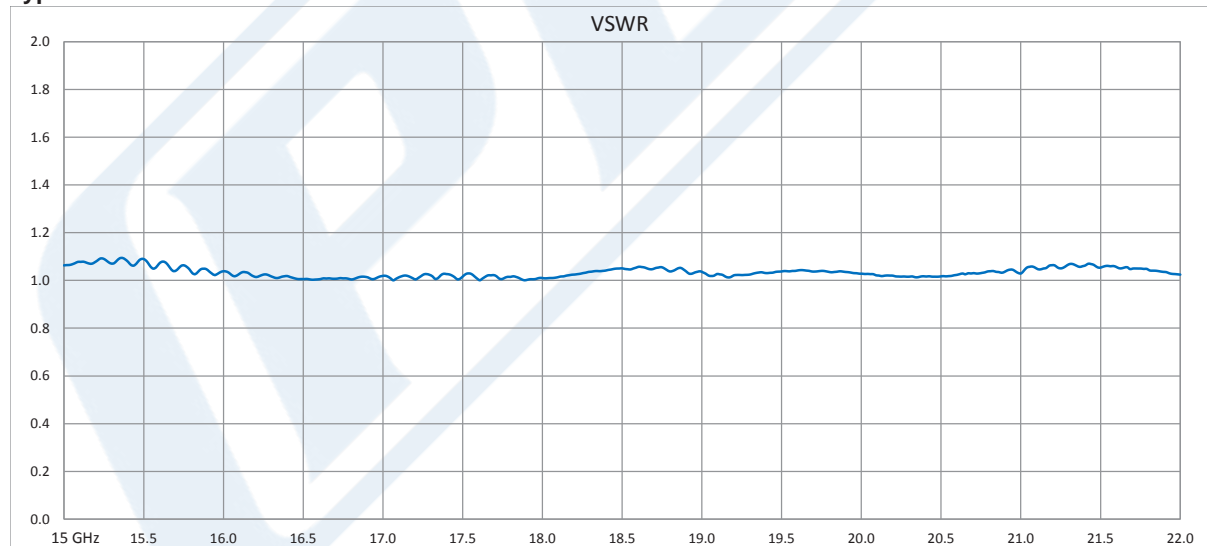
12/17/2015

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



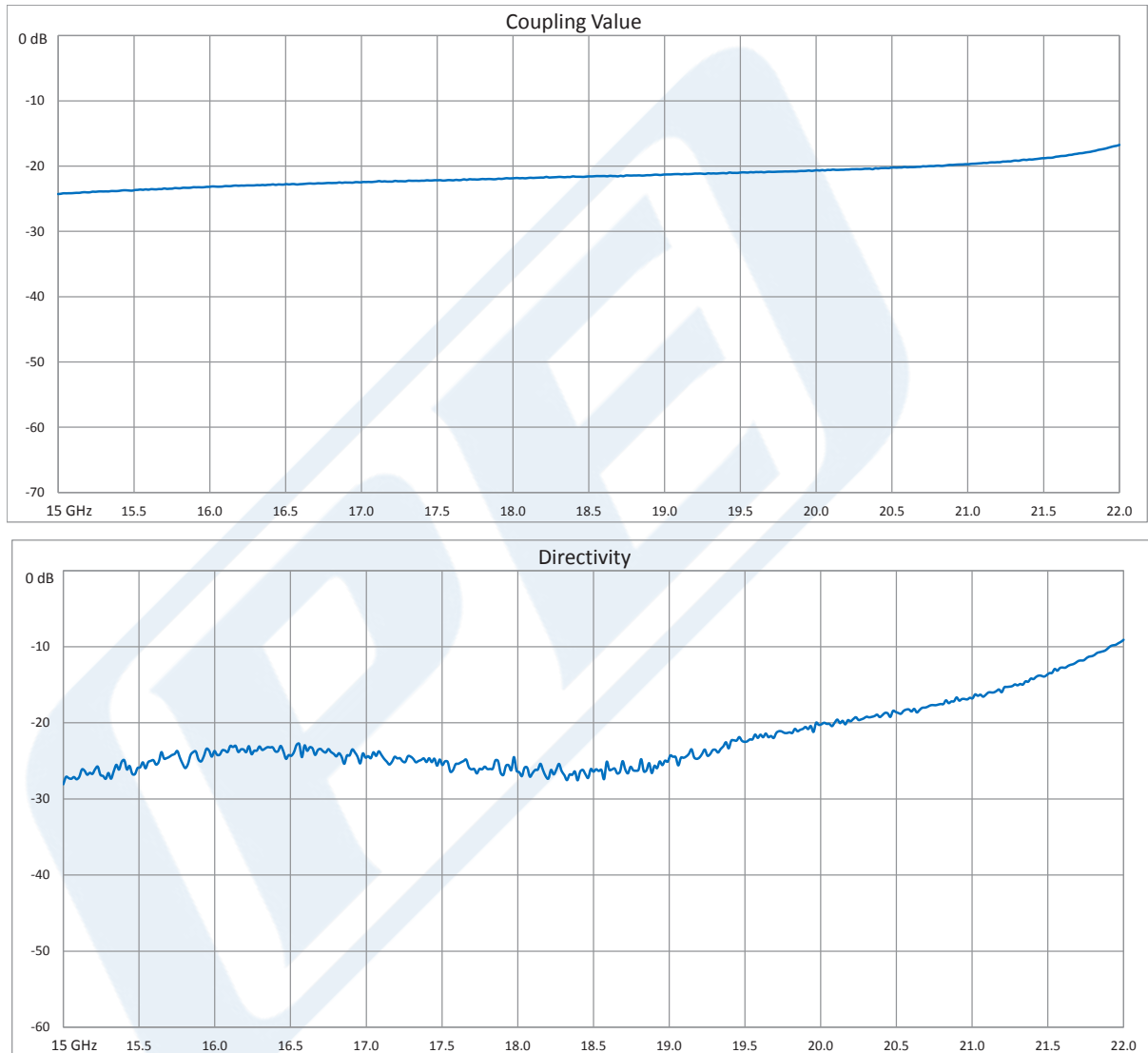
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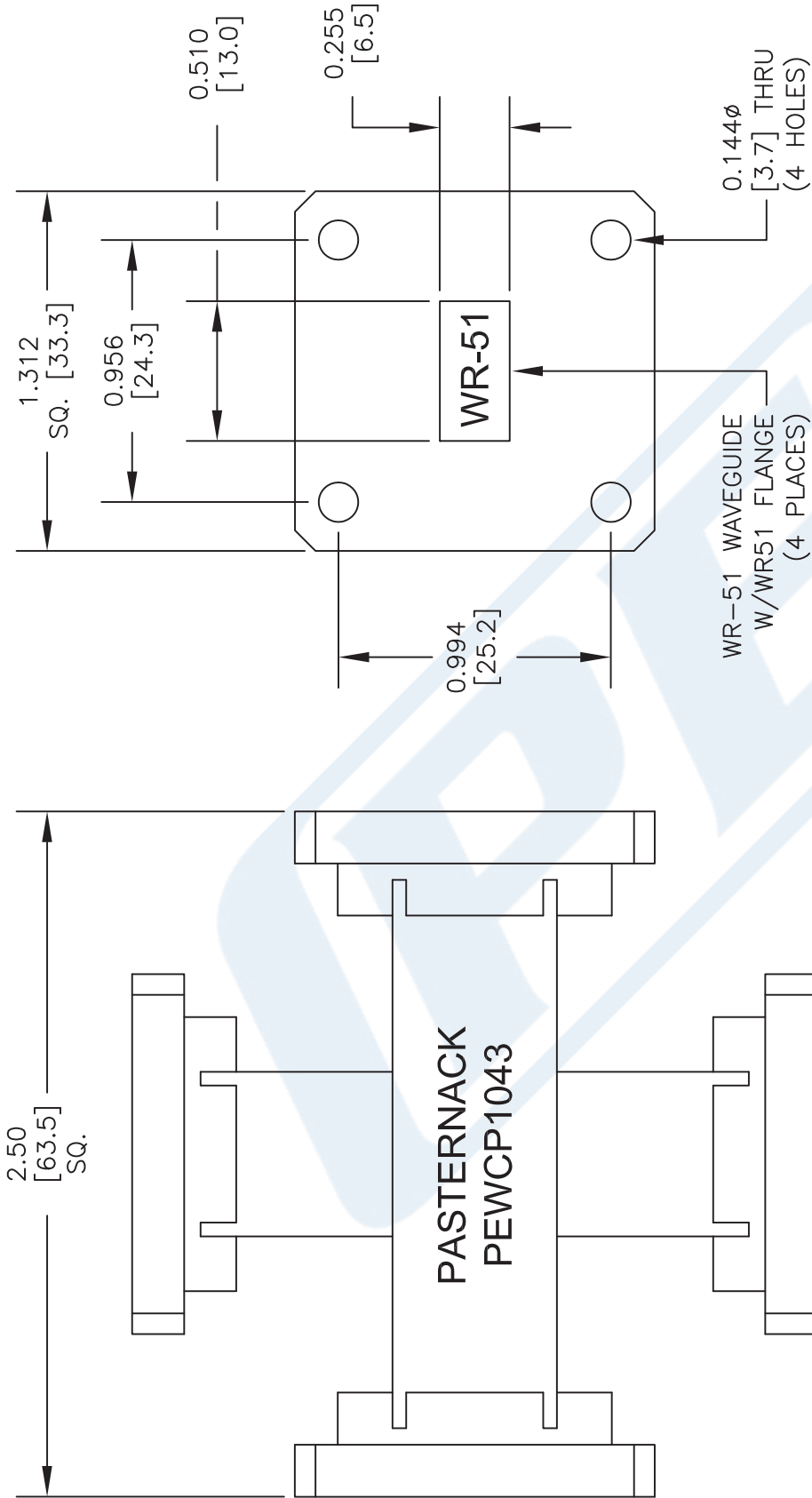
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The UL Registered Firm logo consists of a circular emblem. The outer ring contains the text "ASTERNACK ENTERPRISES, INC." at the top and "REGISTERED FIRM" at the bottom. Inside the circle, the letters "UL" are prominently displayed in a large, bold, sans-serif font. Below "UL", there is smaller text that reads "CERTIFICATE NO. 1098678-0001". To the left of the "UL" text, there is a small vertical label that says "EQUIPMENT".

PEWCIP1043 CAD Drawing

WR-51 20 dB Waveguide Crossguide Coupler, Square Cover Flange, 15 GHz to 22 GHz



DWG TITLE

PEWCIP1043

- 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].

FSCM NO. 53919

CAD FILE 042916

SCALE N/A

SIZE A

2233

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THE ENGINEER'S RF SOURCE

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