



WR-51 Waveguide 40 dB Crossguide Coupler, 3 Port,  
Square Cover Flange, 15 GHz to 22 GHz, Bronze

Waveguide Couplers Assemblies Technical Data

PEWCT1010

The PEWCT1010 is a 40 dB three port, terminated WR-51 crossguide waveguide coupler that operates in the frequency range of 15 to 22 GHz. The coupler has a typical VSWR of 1.05. These designs are made of Bronze with Brass Square Cover Flanges. Pasternack offers a complete family of crossguide couplers in both three port (terminated) and four port (unterminated) configurations that are in stock and ship on the same day. Top wall couplers are also available.

**Features**

- Three Port
- Crossguide Waveguide Coupler
- Terminated
- 40 dB Nominal Coupling Level
- 15 GHz to 22 GHz Frequency Range
- Waveguide Body made of Bronze with Brass Flanges
- Low VSWR

**Applications**

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

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
<b>Coupler</b>				
Nominal Coupling Level		40		dB
Directivity		30		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
<b>Termination</b>				
VSWR		1.02		
Input Power (CW)			1	Watts

**Mechanical Specifications**

<b>Size</b>	
Length	5.62 in [142.75 mm]
Width	2.5 in [63.5 mm]
<b>Interface</b>	
Waveguide Size	WR-51
Flange Type	Square Cover

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Waveguide 40 dB Crossguide Coupler, 3 Port, Square Cover Flange, 15 GHz to 22 GHz, Bronze PEWCT1010](#)



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Flange Material and Plating	Brass
Coupler Body Material and Plating	Bronze
Termination Body Material and Plating	Bronze

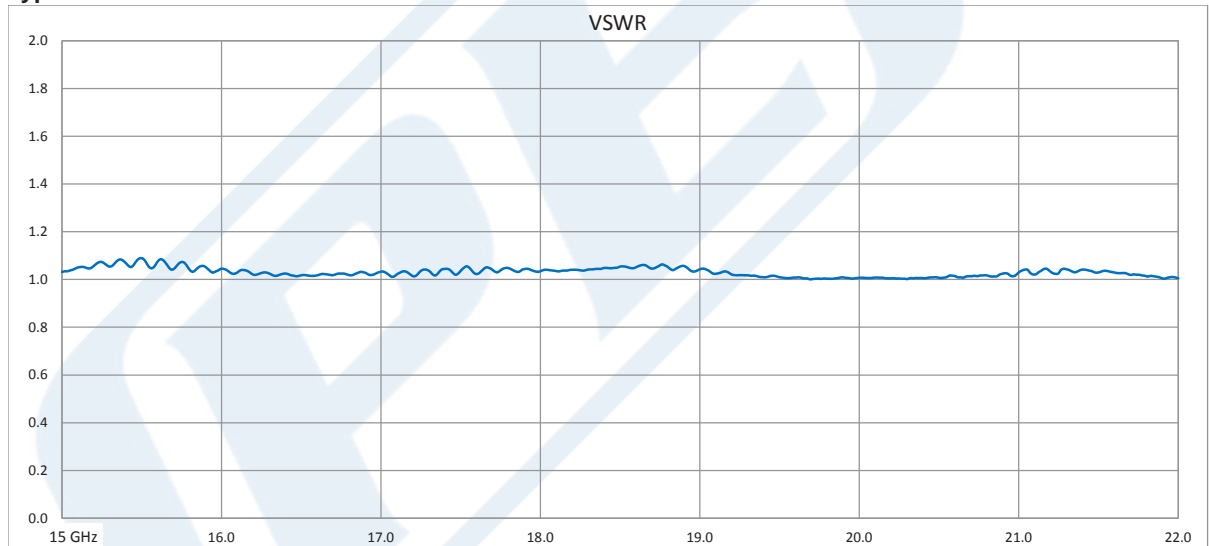
**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



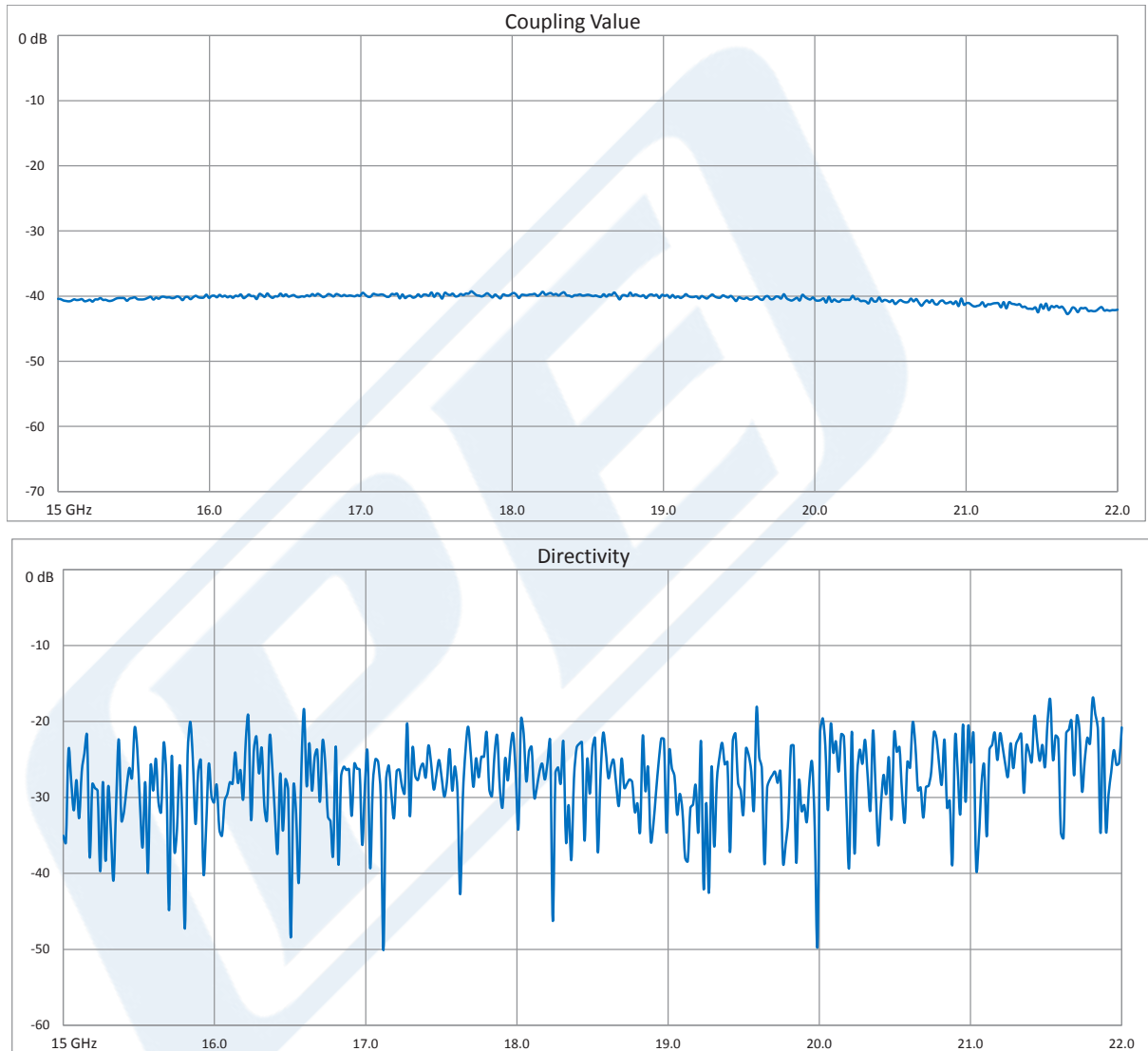
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## Waveguide Couplers Assemblies Technical Data

PEWCT1010

WR-51 Waveguide 40 dB Crossguide Coupler, 3 Port, Square Cover Flange, 15 GHz to 22 GHz, Bronze 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.

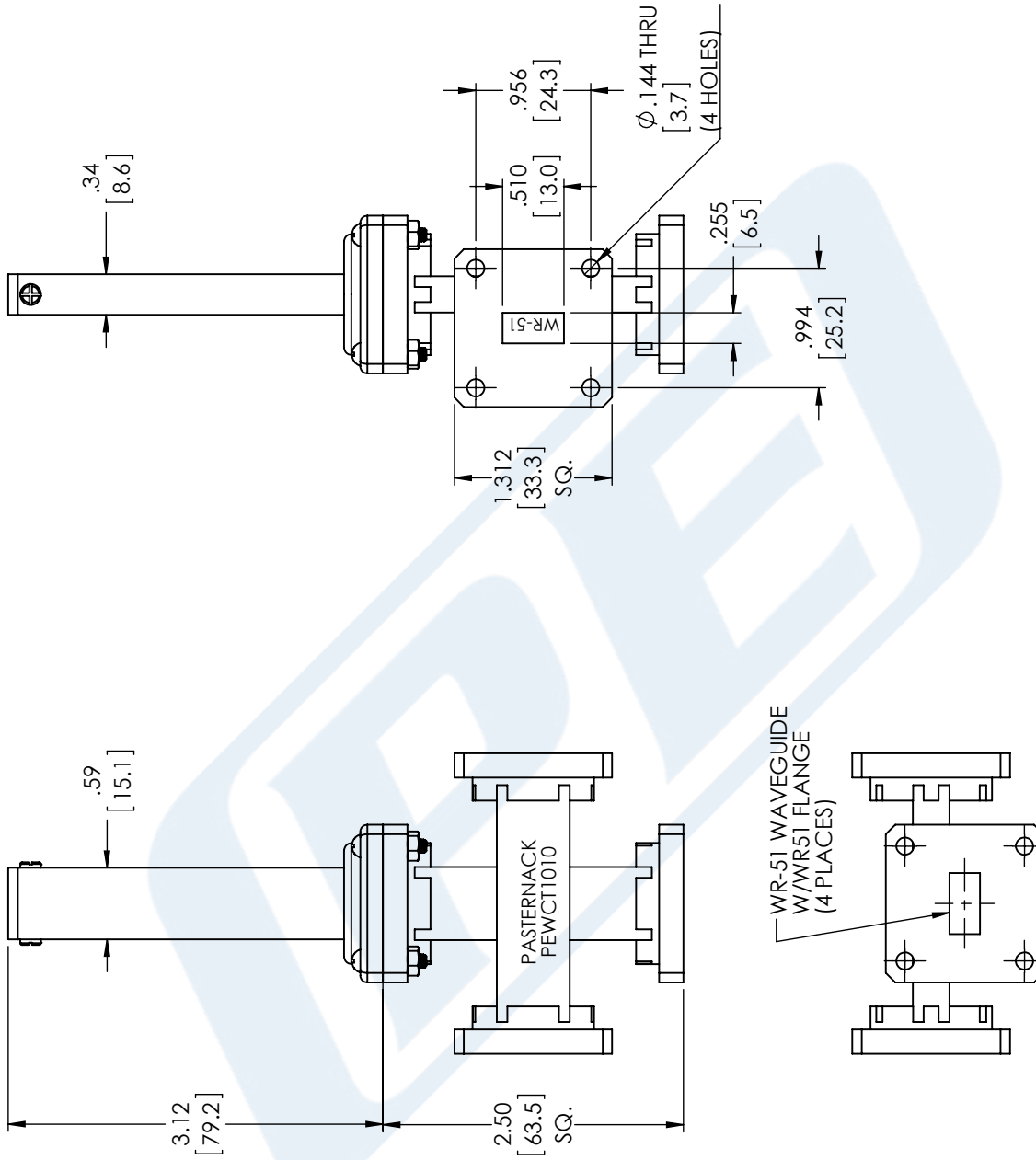
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PEWCT1010 CAD Drawing

WR-51 Waveguide 40 dB Crossguide Coupler, 3 Port, Square Cover Flange, 15 GHz to 22 GHz, Bronze



STANDARD TOLERANCES	
.X	$\pm 0.2$
.XX	$\pm 0.1$
.XXX	$\pm 0.05$

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

**PEWCT1010**

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].

CAGE CODE 53919

CAD FILE 050517

SCALE N/A

SIZE A

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