



## WR-112 Waveguide 50 dB Crossguide Coupler, 3 Port, UG-51/U Square Cover Flange, 7.05 GHz to 10 GHz, Bronze

### Waveguide Couplers Assemblies Technical Data

PEWCT1031

The PEWCT1031 is a 50 dB three port, terminated WR-112 crossguide waveguide coupler that operates in the frequency range of 7.05 to 10 GHz. The coupler has a typical VSWR of 1.05. These designs are made of Bronze with Brass UG-51/U 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
- 50 dB Nominal Coupling Level
- 7.05 GHz to 10 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	7.05		10	GHz
<b>Coupler</b>				
Nominal Coupling Level		50		dB
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
<b>Termination</b>				
VSWR		1.02		
Input Power (CW)			5	Watts

#### Mechanical Specifications

##### Size

Length 8.75 in [222.25 mm]  
 Width 4 in [101.6 mm]

##### Interface

Waveguide Size WR-112  
 Flange Type Square Cover  
 Flange Designation UG-51/U

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Waveguide 50 dB Crossguide Coupler, 3 Port, UG-51/U Square Cover Flange, 7.05 GHz to 10 GHz, Bronze PEWCT1031](#)



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

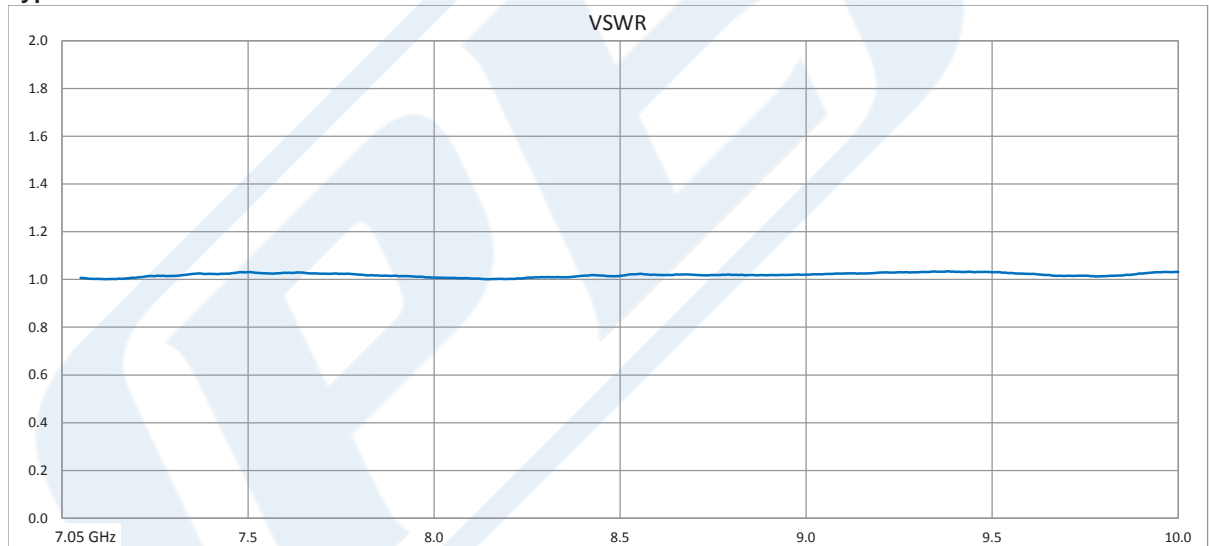
**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



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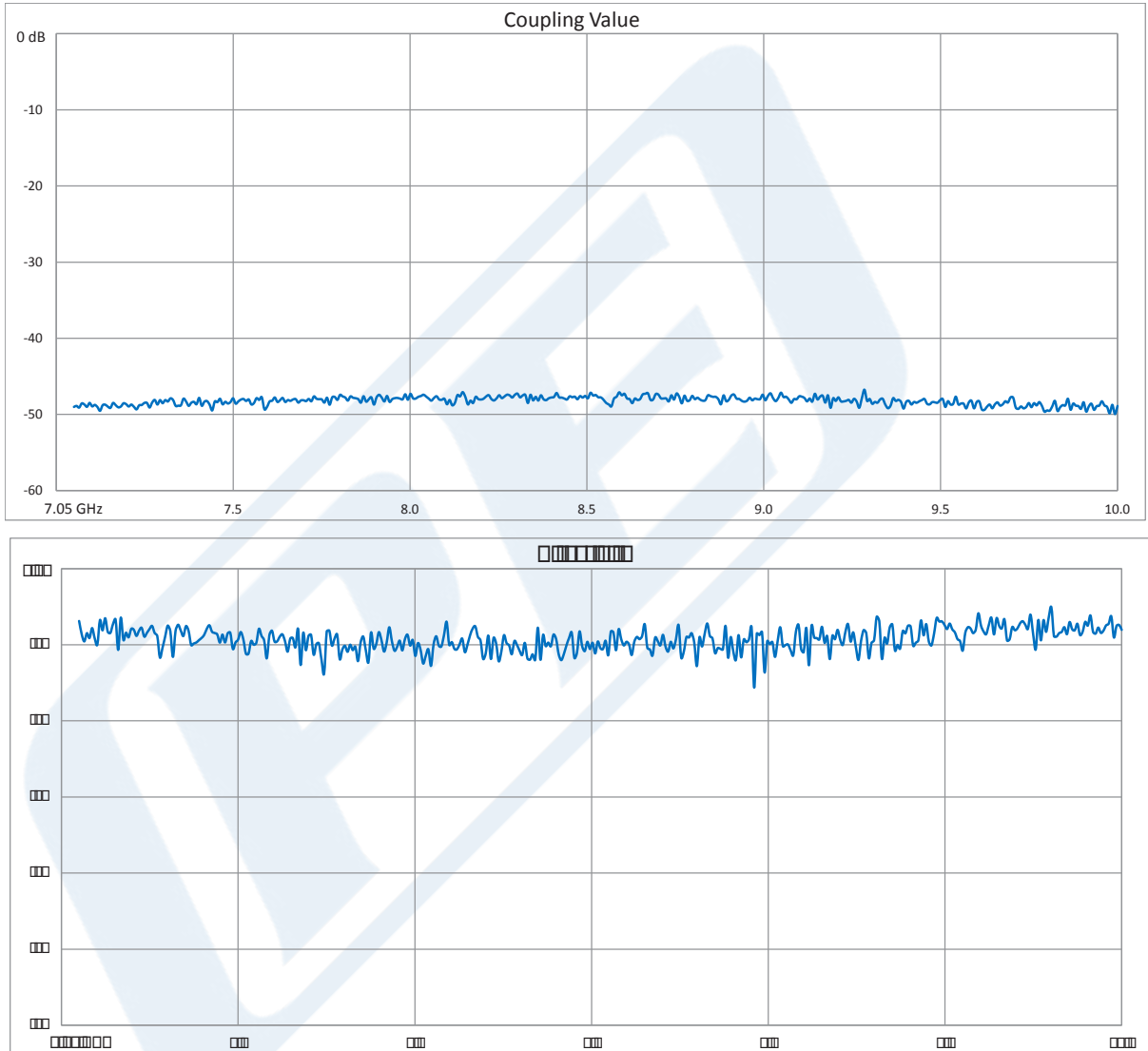




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WR-112 Waveguide 50 dB Crossguide Coupler, 3 Port, UG-51/U Square Cover Flange, 7.05 GHz to 10 GHz, Bronze from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

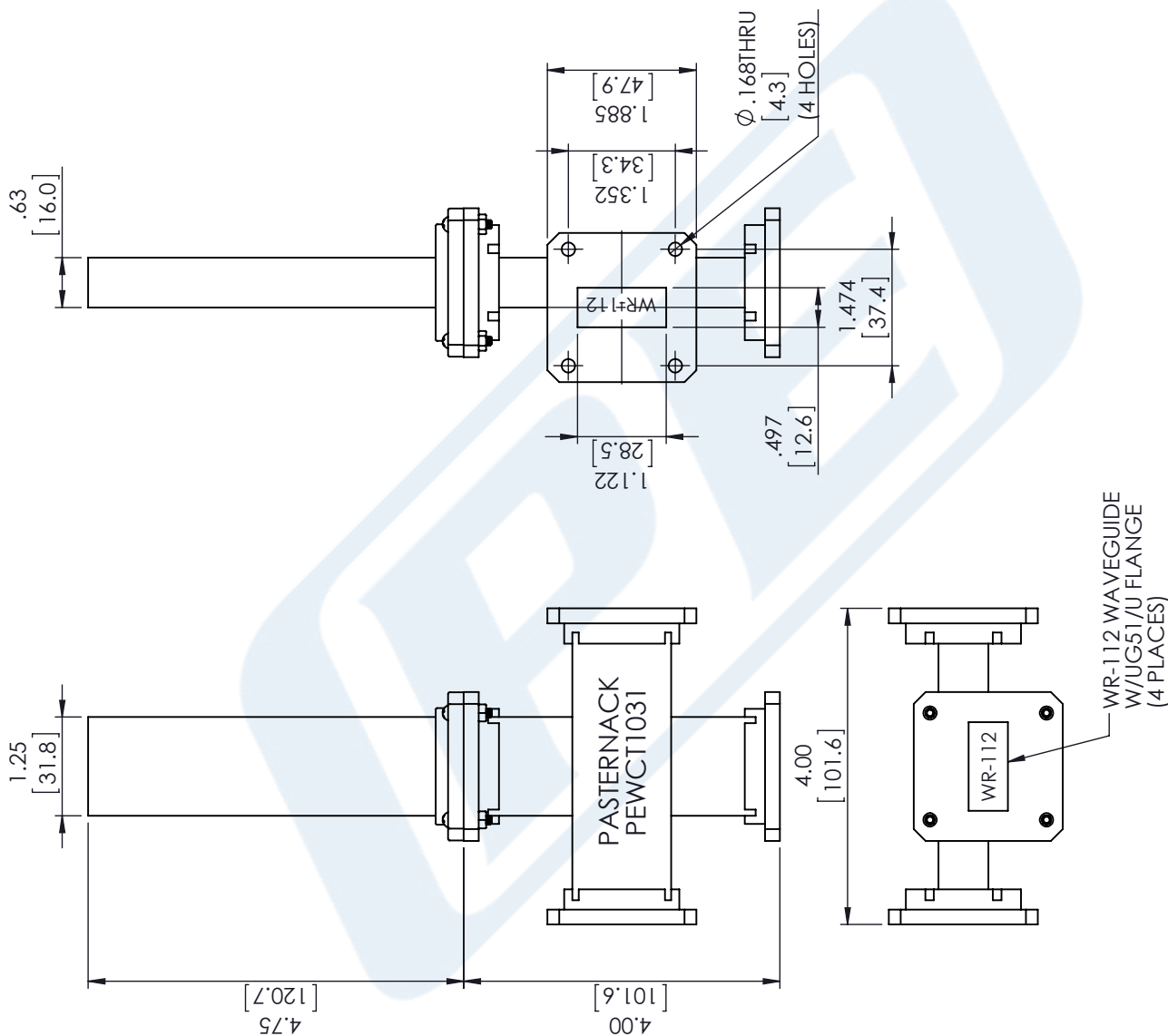
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PEWCT1031 CAD Drawing

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STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PEWCT1031

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 042617

SCALE N/A

SIZE A

0157