



# Waveguide Couplers Assemblies Technical Data

## **PEWCT1111**

The PEWCT1111 is a 50 dB WR-137 four port crossguide coupler with one coupled port terminated (making it a three port coupler) and a coax adapter on the opposite coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.05:1 and are made of bronze with brass UG-344/U Round Cover flanges. The PEWCT1111 is part of a family of cross guide couplers offered by Pasternack with coupling values ranging from 20 to 50 dB. There is also a full family of top wall (broad wall) couplers. For the three port version of this coupler (terminated but no coax adapter) please see the PEWCT1039. For the four port version of this coupler (no termination, no coax adapter) please see the PEWCP1074.

#### Features

- Three Port
- Crossguide Waveguide Coupler
- Terminated
- 50 dB Nominal Coupling Level
- Applications
  - Test Benches
  - Radar
  - Satellite

Microwave Radio

Attenuation Measurements Power Measurements Source Leveling

Waveguide Body made of Bronze with Brass Flanges

N Female Coax Adapter

Low VSWR

5.85 GHz to 8.2 GHz Frequency Range

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	5.85		8.2	GHz
mpedance		50		Ohms
Coupler				
Nominal Coupling Level		50		dB
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Termination				
Input Power (CW)			6	Watts
Vaveguide to Coax Adapters				
VSWR		1.25:1		

## **Mechanical Specifications**

Interface Waveguide Size

WR-137

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 GHz, Bronze PEWCT1111

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





# **CORRECT**

**PEWCT1111** 

# Waveguide Couplers Assemblies Technical Data

Flange Type Flange Designation Flange Material and Plating RF Connector Type

Coupler Body Material and Plating Termination Body Material and Plating Round Cover UG-344/U Brass N Female

Bronze Bronze

## **Environmental Specifications**

Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

Typical Performance Data

3.0	VSWR											
2.8												
2.6												
2.4												
2.2												
2.0												
1.8												
1.6												
1.4												
1.2												
1.0												
	.85 GHz	6.1	6.4	6.7	7.0	7.3	7.	6 7	.9 8.2			

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 GHz, Bronze PEWCT1111

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

ISO 9001 : 2008 Registered







# Waveguide Couplers Assemblies Technical Data

**Coupling Value** 0 dB -10 -20 -30 -40 -50 -60 5.8GHz 6.1 6.4 6.7 7.0 7.3 7.6 7.9 8.2 Directivity 0 dB Mount Marine MM -10 -20 -30 -40 -50 -60 5.8 GHz 6.1 6.4 6.7 7.0 7.3 7.6 7.9 8.2

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 GHz, Bronze PEWCT1111

ISO 9001 : 2008 Registered

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

© 2017 Pasternack Enterprises All Rights Reserved





# Waveguide Couplers Assemblies Technical Data

## **PEWCT1111**

WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 GHz, Bronze PEWCT1111

URL: https://www.pasternack.com/wr137-waveguide-50db-crossguide-coupler-ug-344-round-n-8.2-ghz-pewct1111-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.



**PEWCT1111 CAD Drawing** 

WR-137 Waveguide 50 dB Crossguide Coupler, UG-344/U Round Cover Flange, N Female Coupled Port, 5.85 GHz to 8.2 GHz, Bronze



© 2017 Pasternack Enterprises All Rights Reserved