



## WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band

### Waveguide to Coax Adapters Technical Data Sheet

PEWCA1007

#### Features

- X Band
- 8.2 to 12.4 GHz Frequency Range
- WR-90 Waveguide Interface
- Grooved CPR-90G Flange
- SMA Female RF Interface

#### Applications

- Test Benches
- Radar
- Satellite
- Microwave Radio Systems
- Military and Space
- Communication Systems

#### Description

The PEWCA1007 is a waveguide to coaxial adapter operating in the X Band with a 8.2 to 12.4 GHz frequency range. This adapter offers a WR-90 waveguide interface size using a Grooved CPR-90G Flange. The PEWCA1007 is constructed of Copper Alloy and painted to ensure durability. The coaxial connector offered by this adapter uses a SMA Female Nickel Plated Brass Connector.

#### Configuration

Waveguide Size	WR-90
Flange	CPR-90G
RF Connector	SMA Female
Impedance	50 Ohms
Body Geometry	Right Angle

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.25:1		

#### Mechanical Specifications

Weight	0.292 lbs [132.45 g]
<b>RF Connector</b>	
Connector Type	SMA Female
Body Material and Plating	Brass, Nickel
<b>Waveguide Interface</b>	
Waveguide Type	WR-90
Flange Type	CPR-90G
Body Material and Plating	Copper Alloy, Paint

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band PEWCA1007](#)



## WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band

### Waveguide to Coax Adapters Technical Data Sheet

PEWCA1007

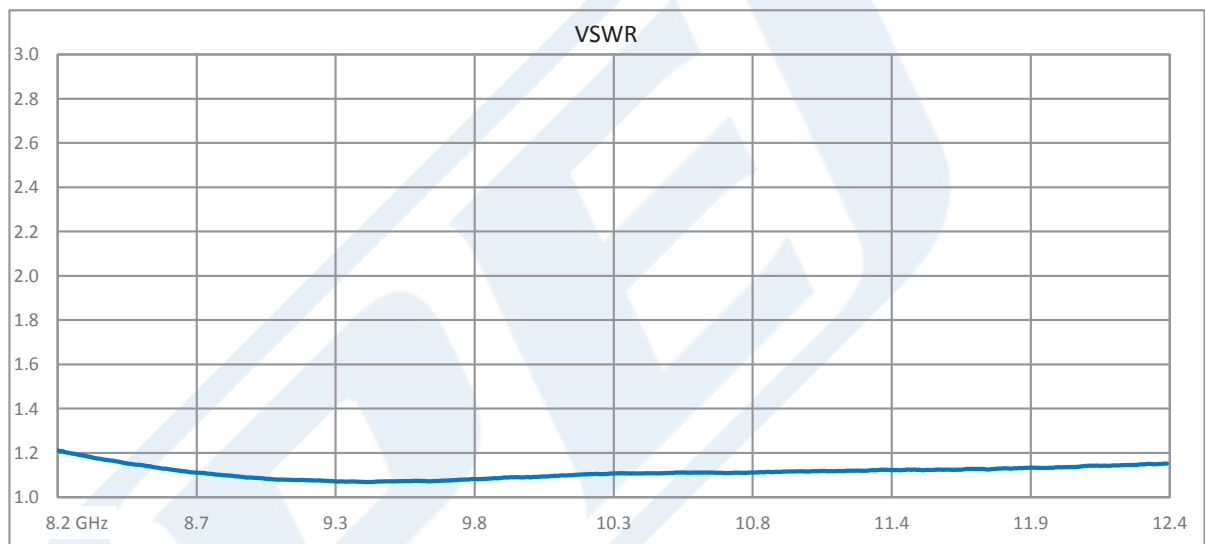
**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

- Values at +25 °C, sea level unless stated otherwise

#### Typical Performance Data



WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band 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.

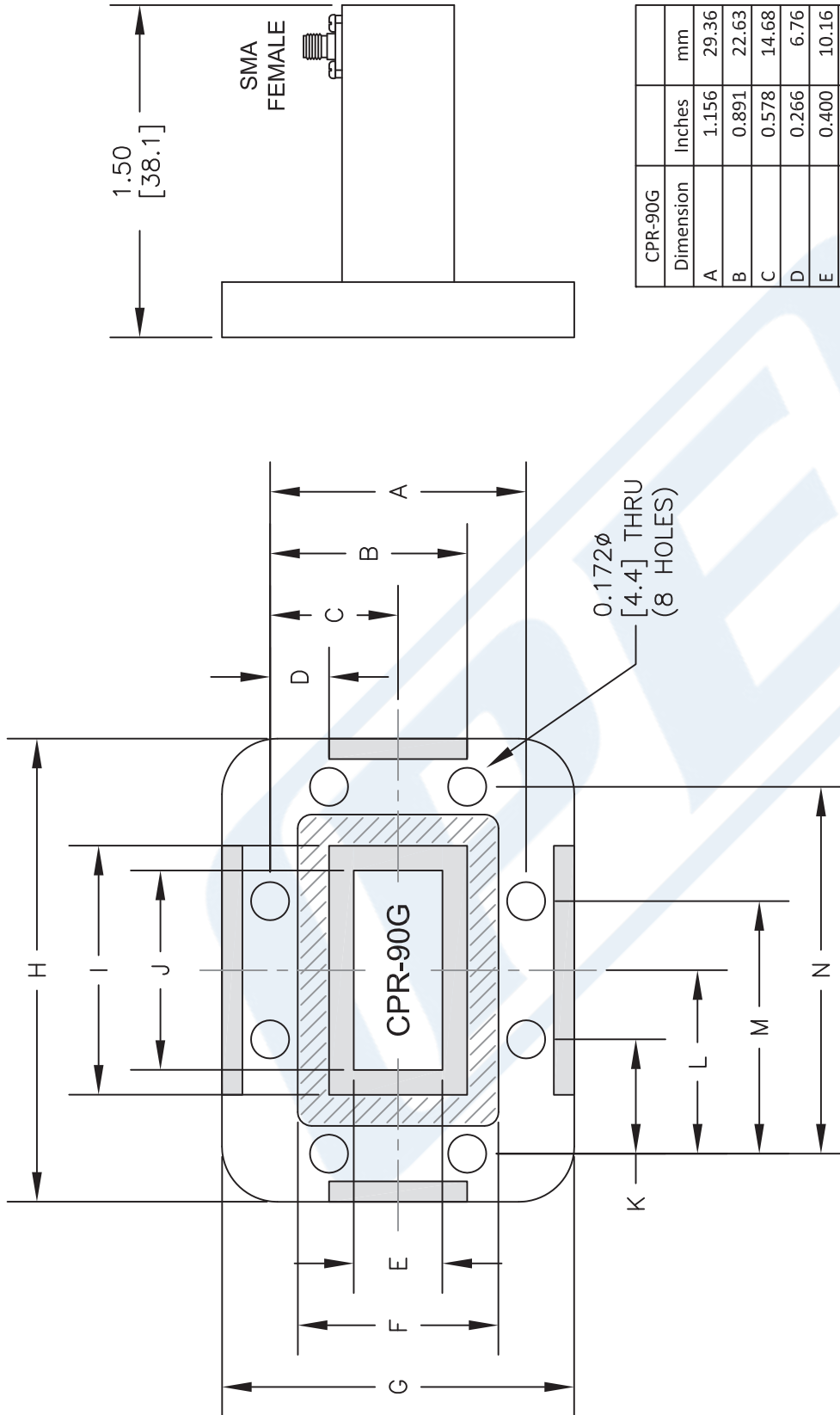
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band PEWCA1007](#)

URL: <https://www.pasternack.com/wr-90-cpr-90g-grooved-sma-female-waveguide-coax-adapter-12.4-ghz-pewca1007-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.

# PEWCA1007 CAD Drawing

WR-90 CPR-90G Grooved Flange to SMA Female Waveguide to  
Coax Adapter Operating From 8.2 GHz to 12.4 GHz, X Band



CPR-90G	Dimension	Inches	mm
A		1.156	29.36
B		0.891	22.63
C		0.578	14.68
D		0.266	6.76
E		0.400	10.16
F		0.906	23.01
G		1.590	40.39
H		2.090	53.09
I		1.124	28.55
J		0.900	22.86
K		0.516	13.11
L		0.828	21.03
M		1.141	28.98
N		1.656	42.06

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
DECIMALS ANGLES  
.X ±.030 ±1/2 DEG.  
.XX ±.015 FRACTIONS  
.XXX ±.005 ±1/32

\* THESE DIMENSIONS AND TOLERANCES  
SUPERSEDE NOTE #1 ON TITLE BLOCK.

DWG TITLE

**PEWCA1007**

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].

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 092116

SCALE N/A

SIZE A

2233