

**WR-90 to SMA Female Waveguide to Coax Adapter  
 CPR-90G Grooved Flange With 8.2 GHz to 12.4 GHz  
 Frequency Range For X Band**

The FMWCA1007 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 FMWCA1007 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	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
VSWR			1.25:1	

**Mechanical Specifications**

Weight 0.292 lbs [132.45 g]

**RF Connector**

Connector Type SMA Female  
 Body Material and Plating Brass, Nickel

**Waveguide Interface**

Waveguide Type WR-90  
 Flange Type CPR-90G  
 Body Material and Plating Copper, Paint

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

**Plotted and Other Data**

Notes:  
 • Values at +25 °C, sea level unless stated otherwise



**Features:**

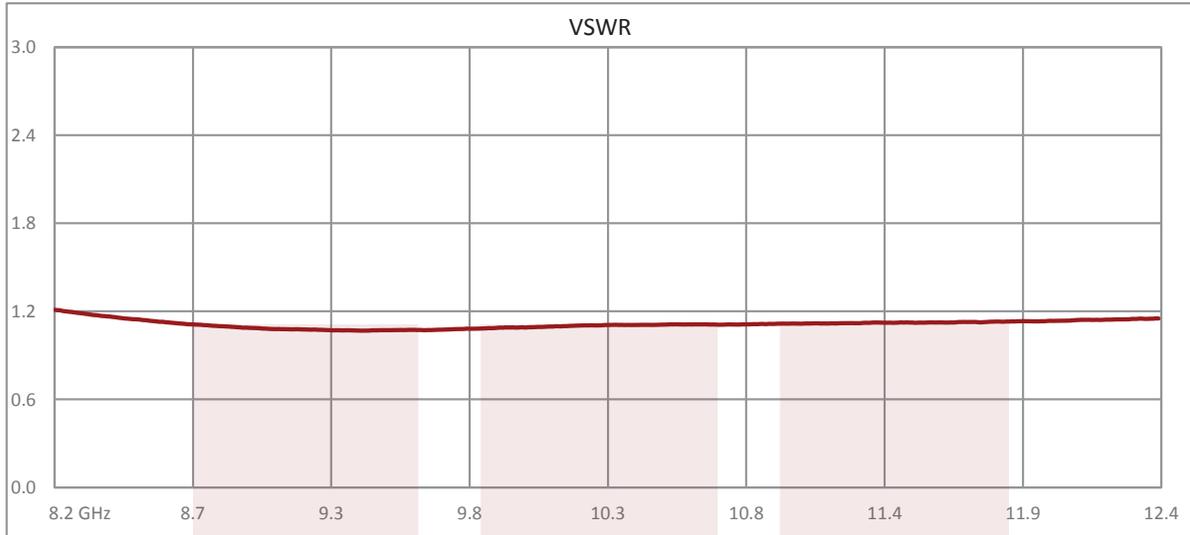
- X Band
- 8.2 to 12.4 GHz Frequency Range
- WR-90 Waveguide Interface
- Grooved CPR-90G Flange
- SMA Female RF Interface

**Applications:**

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

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**Typical Performance Data**

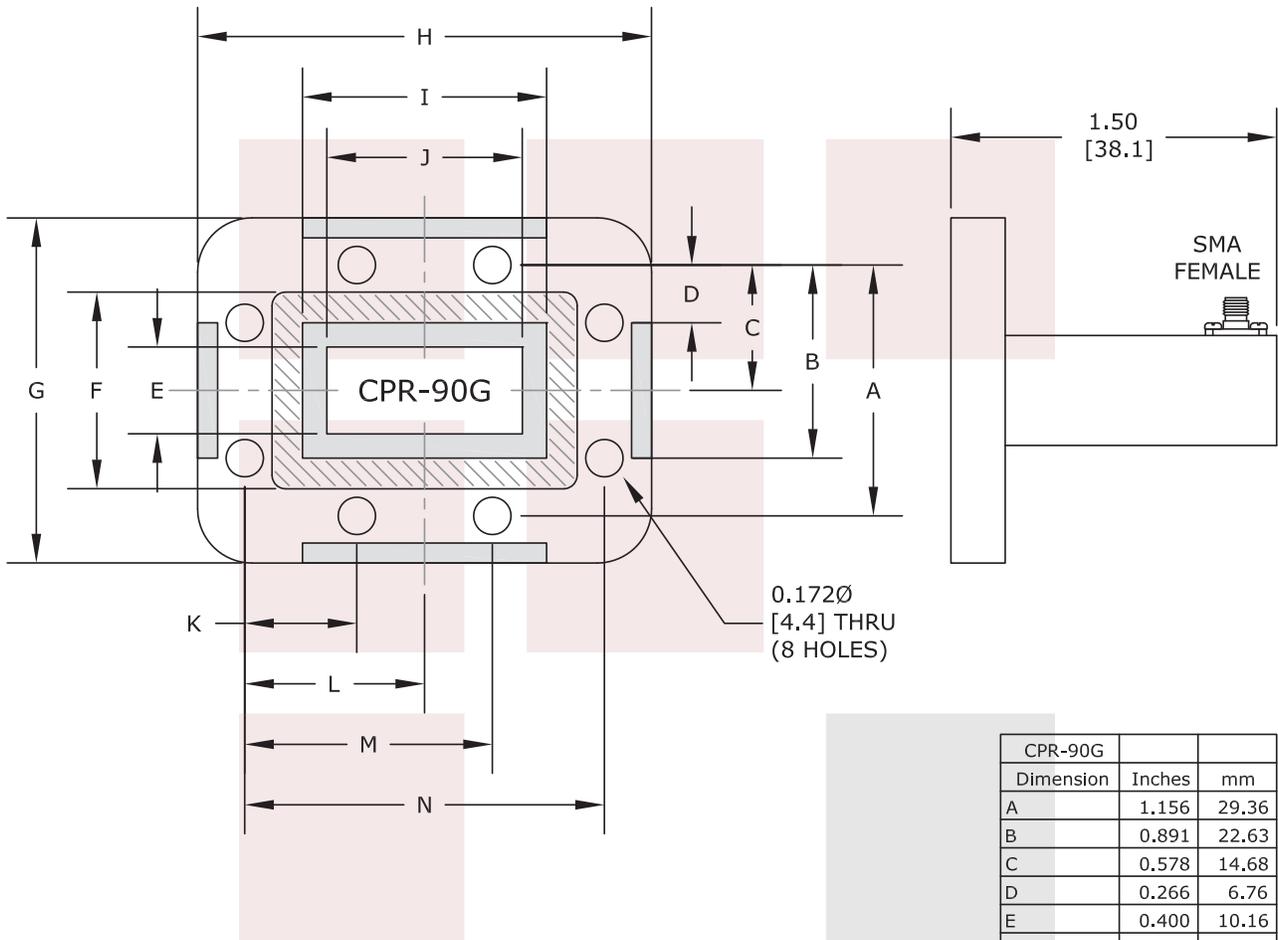


WR-90 to SMA Female Waveguide to Coax Adapter CPR-90G Grooved Flange With 8.2 GHz to 12.4 GHz Frequency Range For X Band from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 to SMA Female Waveguide to Coax Adapter CPR-90G Grooved Flange With 8.2 GHz to 12.4 GHz Frequency Range For X Band FMWCA1007](#)

URL: <https://www.fairviewmicrowave.com/wr-90-sma-female-waveguide-coax-adapter-cpr-90g-grooved-12.4-ghz-fmw-ca1007-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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.

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

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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].

TITLE  
 WR-90 to SMA Female Waveguide to Coax Adapter  
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DWG NO	FMWCA1007	CAGE CODE	3FKR5
CAD FILE	092116	SHEET	SCALE N/A SIZE A 2233