

**WR-112 to N Female Waveguide to Coax Adapter
 PDR84 Flange With 7.05 GHz to 10 GHz Frequency
 Range For X Band**

The SMW112ACNG is a waveguide to coaxial adapter with a frequency range of 7.05 to 10 GHz, operating in the X band. This adapter offers a precision tolerance PDR84 flange and a WR-112 waveguide interface size. SMW112ACNG is constructed of aluminum to ensure durability and repeatable RF performance. The coaxial connector offered by this adapter uses an N female connector and the package is REACH and RoHS compliant.

Configuration

Waveguide Size	WR-112
Flange	PDR84
RF Connector	N Female
Impedance	50 Ohms
Body Geometry	Right Angle

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
VSWR			1.35:1	
Insertion Loss		0.25		dB
Input Power (CW)			150	Watts
Input Power (Peak)			3	KWatts

Mechanical Specifications

Width	2.5 in [63.5 mm]
Height	1.75 in [44.45 mm]
Weight	0.15609 lbs [70.8 g]

RF Connector

Connector Type	N Female
Contact Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel
Torque	7 in-lbs [0.79 Nm]

Waveguide Interface

Waveguide Type	WR-112
Flange Type	PDR84
Body Material and Plating	Aluminum

Environmental Specifications

Temperature

Operating Range	-55 to +120 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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

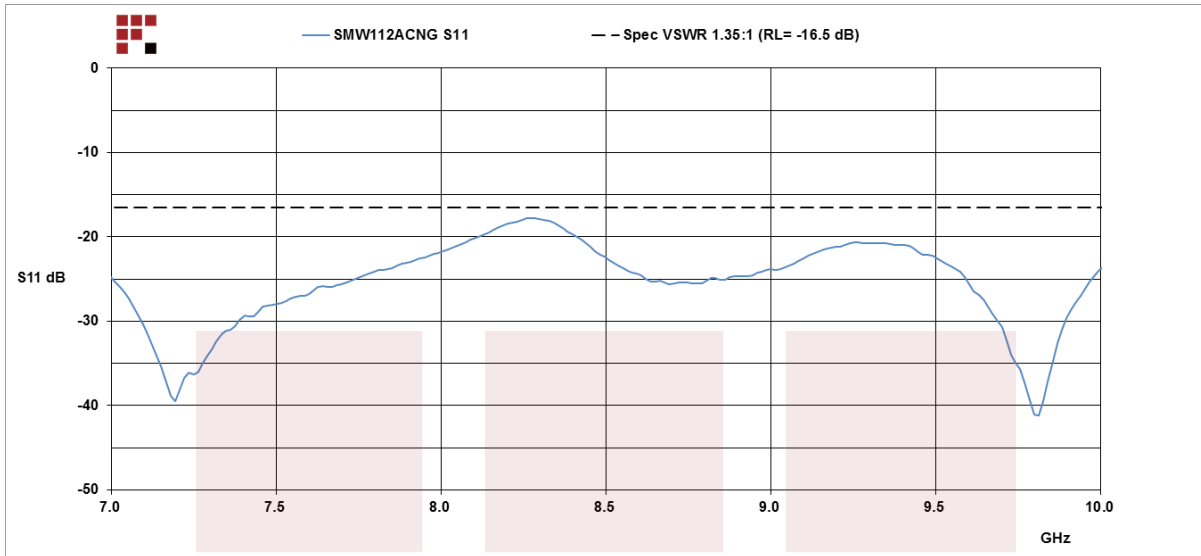


Features:

- X Band, 7.05 to 10 GHz Frequency Range
- WR-112 Waveguide Interface with PDR84 Flange
- N Female Coaxial Interface
- Comprehensive waveguide offerings also include E-Bends, H-Bends, Sections, Filters, Terminations, Couplers, and more.

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Typical Performance Data

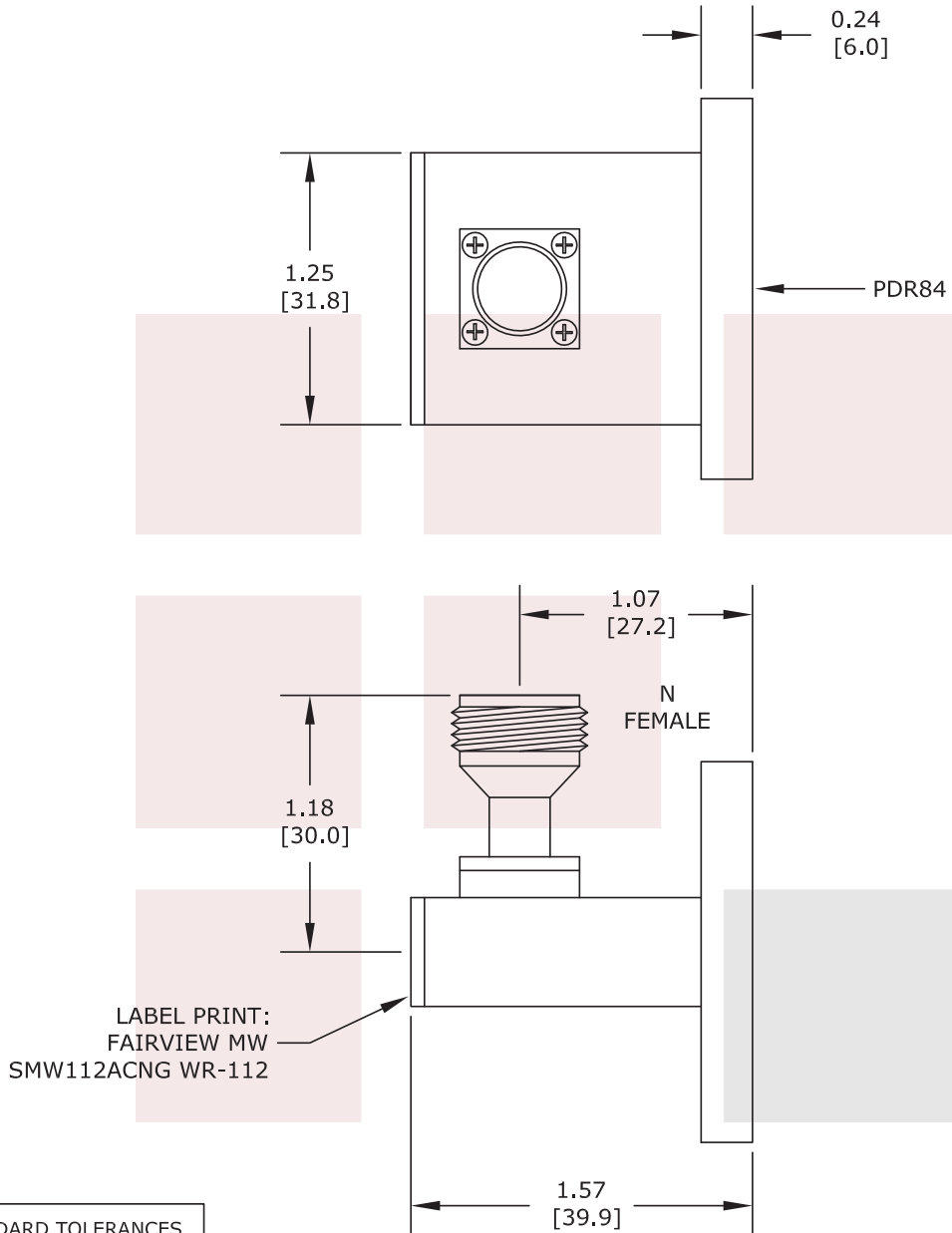


WR-112 to N Female Waveguide to Coax Adapter PDR84 Flange With 7.05 GHz to 10 GHz Frequency Range For X Band from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-112 to N Female Waveguide to Coax Adapter PDR84 Flange With 7.05 GHz to 10 GHz Frequency Range For X Band SMW112ACNG](https://www.fairviewmicrowave.com/wr-112-n-female-connector-waveguide-coax-adapter-7.05-10-ghz-smw112acng-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr-112-n-female-connector-waveguide-coax-adapter-7.05-10-ghz-smw112acng-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.

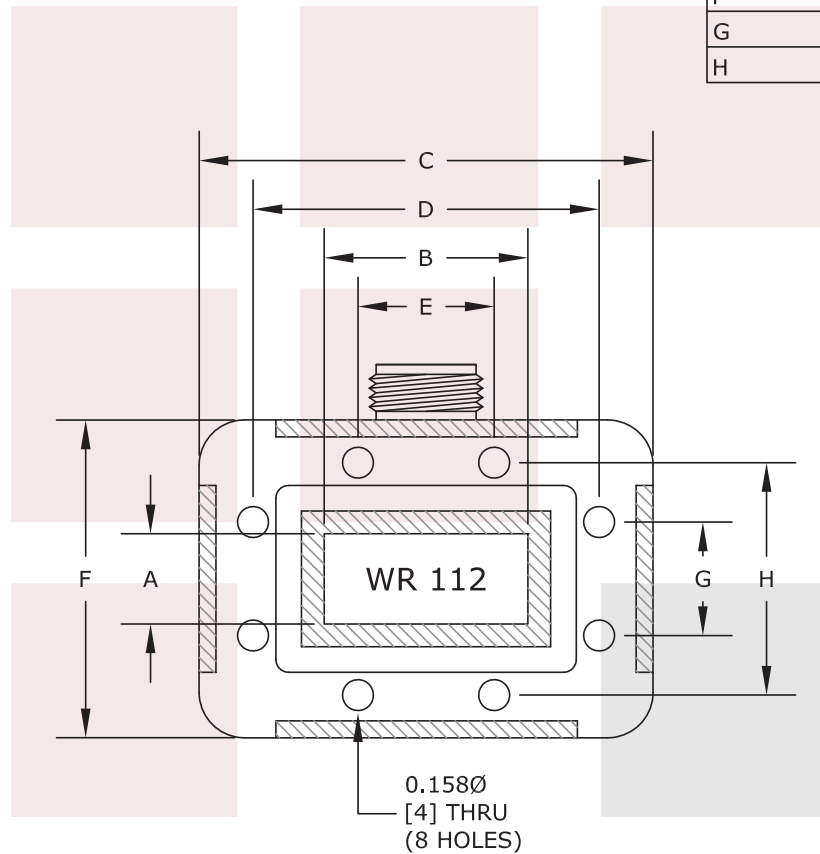


STANDARD TOLERANCES	
.X	±0.2
.XX	±0.1
.XXX	±0.05

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.		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].			
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		DWG NO SMW112ACNG		CAGE CODE 3FKR5	
TITLE WR-112 to N Female Waveguide to Coax Adapter PDR84 Flange With 7.05 GHz to 10 GHz Frequency Range For X Band		CAD FILE 072516	SHEET	SCALE N/A	SIZE A 2233

PDR84	Inches	mm
Dimension		
A	0.497	12.62
B	1.122	28.50
C	2.500	63.50
D	1.906	48.41
E	0.750	19.05
F	1.752	44.50
G	0.625	15.88
H	1.280	32.51



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.1
.XXX	±0.05

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