

**50 dB WR-112 Waveguide Crossguide Coupler With
CPR-112G Grooved Flange And 7.05 GHz to 10 GHz**

The FMWCP1070 is a WR-112 crossguide waveguide coupler that operates in the frequency range of 7.05 to 10 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a cross wall configuration that result in a mid-band nominal coupling value of 20, 30, 40 or 50 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. This WR-112 waveguide coupler uses grooved CPR-112 flanges. Fairview offers a complete family of waveguide Crossguide and Top wall couplers that are in-stock and ship same day.



Features:

- Crossguide Waveguide Coupler
- 50 dB Nominal Coupling Level
- 7.05 GHz to 10 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR
- Grooved CPR

Electrical Specifications*

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		50		dB

* Values at 25°C, sea level

Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

Mechanical Specifications

Size	
Length	4 in [101.6 mm]
Width/Dia.	4 in [101.6 mm]
Weight	1.61 lbs [730.28 g]
Configuration	
Design	None Crossguide
Size	WR-112
Waveguide Material and Plating	Copper Alloy, Silver
Input Flange	
Flange Type	CPR-112G
Material	Copper Alloy
Plating	Silver
Output Flange	
Flange Type	CPR-112G
Material	Copper Alloy
Plating	Silver
Coupled Flange(s)	
Flange Type	CPR-112G
Material	Copper Alloy
Plating	Silver

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

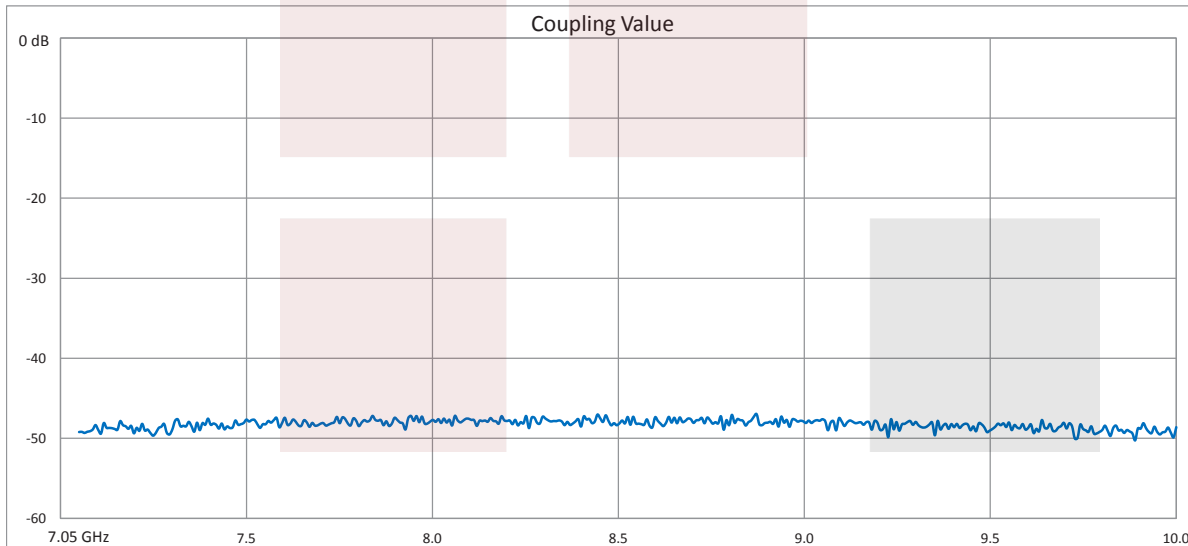
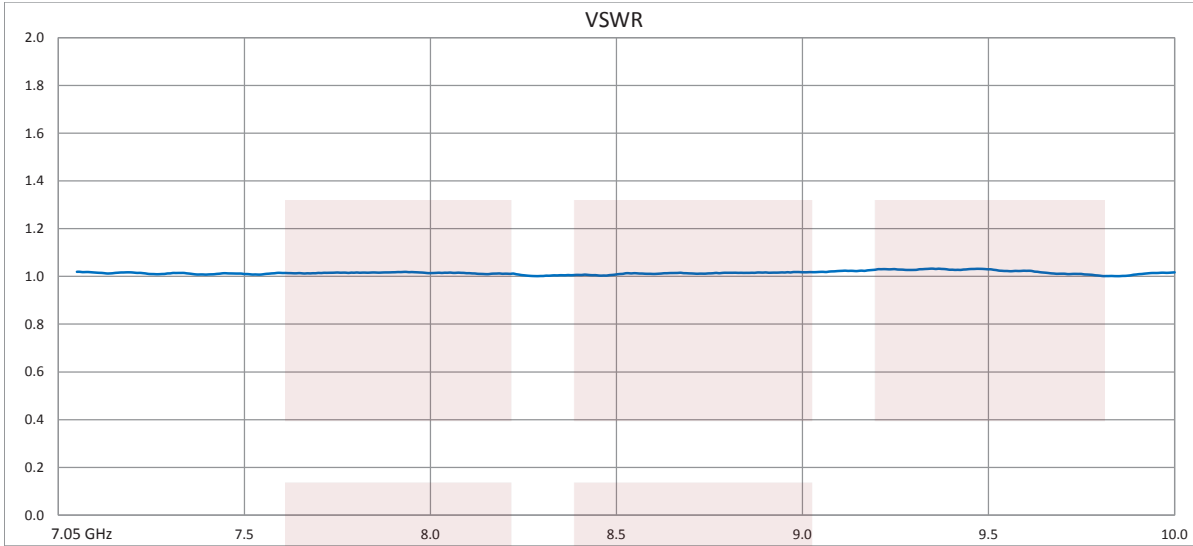
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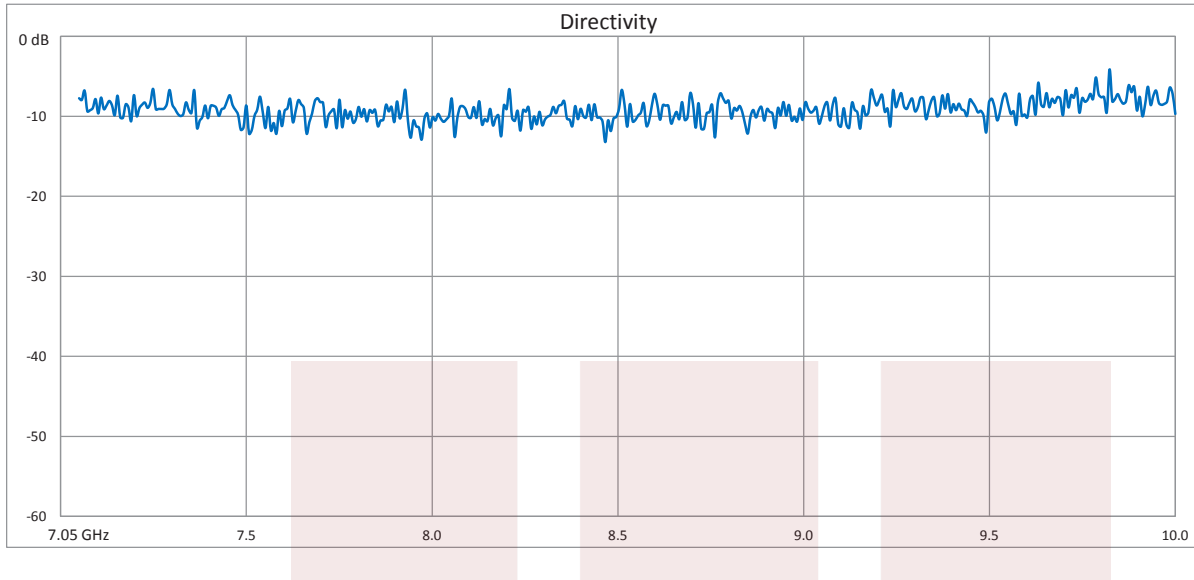
Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



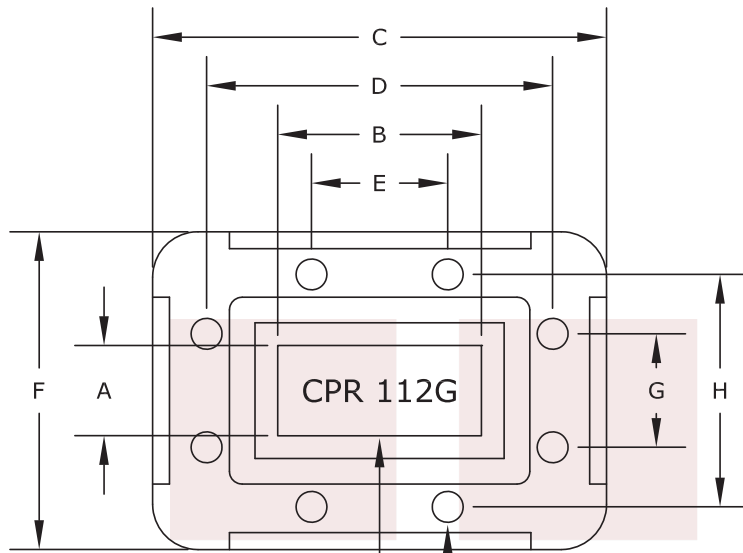


50 dB WR-112 Waveguide Crossguide Coupler With CPR-112G Grooved Flange And 7.05 GHz to 10 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-112 Waveguide Crossguide Coupler With CPR-112G Grooved Flange And 7.05 GHz to 10 GHz FMWCP1070](#)

URL: <http://www.fairviewmicrowave.com/wr-112-50-db-waveguide-crossguide-coupler-grooved-cpr-112g-grooved-none-fmwcp1070-p.aspx>

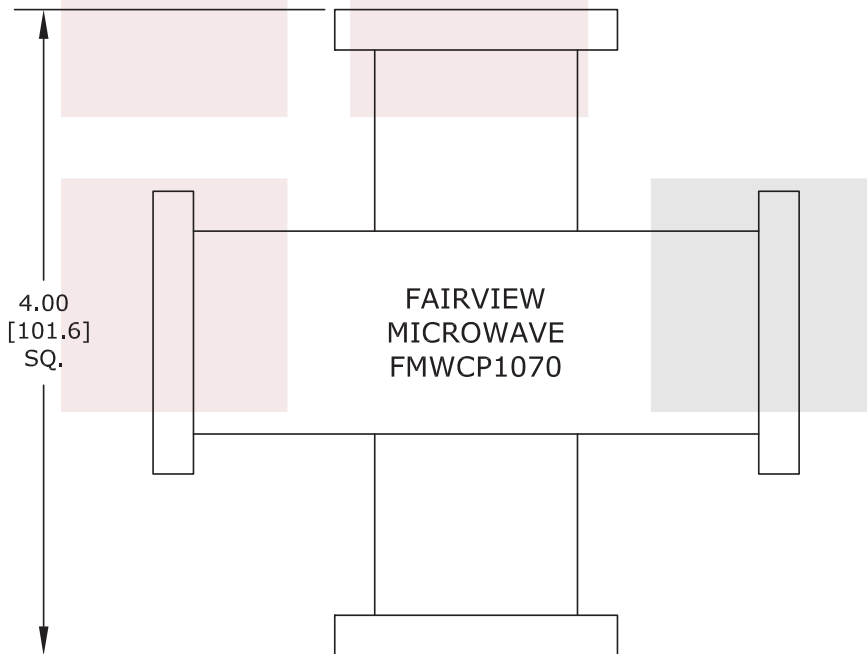
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to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



CPR 112G		
Dimension	Inches	mm
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

WR-112 WAVEGUIDE
 W/CPR 112G FLANGE
 (4 PLACES)

0.169Ø
 [4.3] THRU
 (8 HOLES)



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TITLE 50 dB WR-112 Waveguide Crossguide Coupler With CPR-112G Grooved Flange And 7.05 GHz to 10 GHz		DWG NO FMWCP1070		CAGE CODE 3FKR5	
CAD FILE	021816	SHEET	SCALE	N/A	SIZE A 2233