

20 dB WR-90 Waveguide Crossguide Coupler With CPR-90G Grooved Flange And 8.2 GHz to 12.4 GHz

The FMWCP1059 is a WR-90 crossguide waveguide coupler that operates in the frequency range of 8.2 to 12.4 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-90 waveguide coupler uses grooved CPR-90 flanges. Fairview offers a complete family of waveguide Crossguide and Top wall couplers that are in-stock and ship same day.

Electrical Specifications*

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
Directivity		25		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		20		dB

* Values at 25°C, sea level

Mechanical Specifications

Size

Length	3 in [76.2 mm]
Width/Dia.	3 in [76.2 mm]
Weight	1.07 lbs [485.34 g]

Configuration

Design	None Crossguide
Size	WR-90
Waveguide Material and Plating	Copper Alloy, Silver

Input Flange

Flange Type	CPR-90G
Material	Copper Alloy
Plating	Silver

Output Flange

Flange Type	CPR-90G
Material	Copper Alloy
Plating	Silver

Coupled Flange(s)

Flange Type	CPR-90G
Material	Copper Alloy
Plating	Silver

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

RoHS Compliant	Yes
REACH Compliant	12/17/2015



Features:

- Crossguide Waveguide Coupler
- 20 dB Nominal Coupling Level
- 8.2 GHz to 12.4 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR
- Grooved CPR

Applications:

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

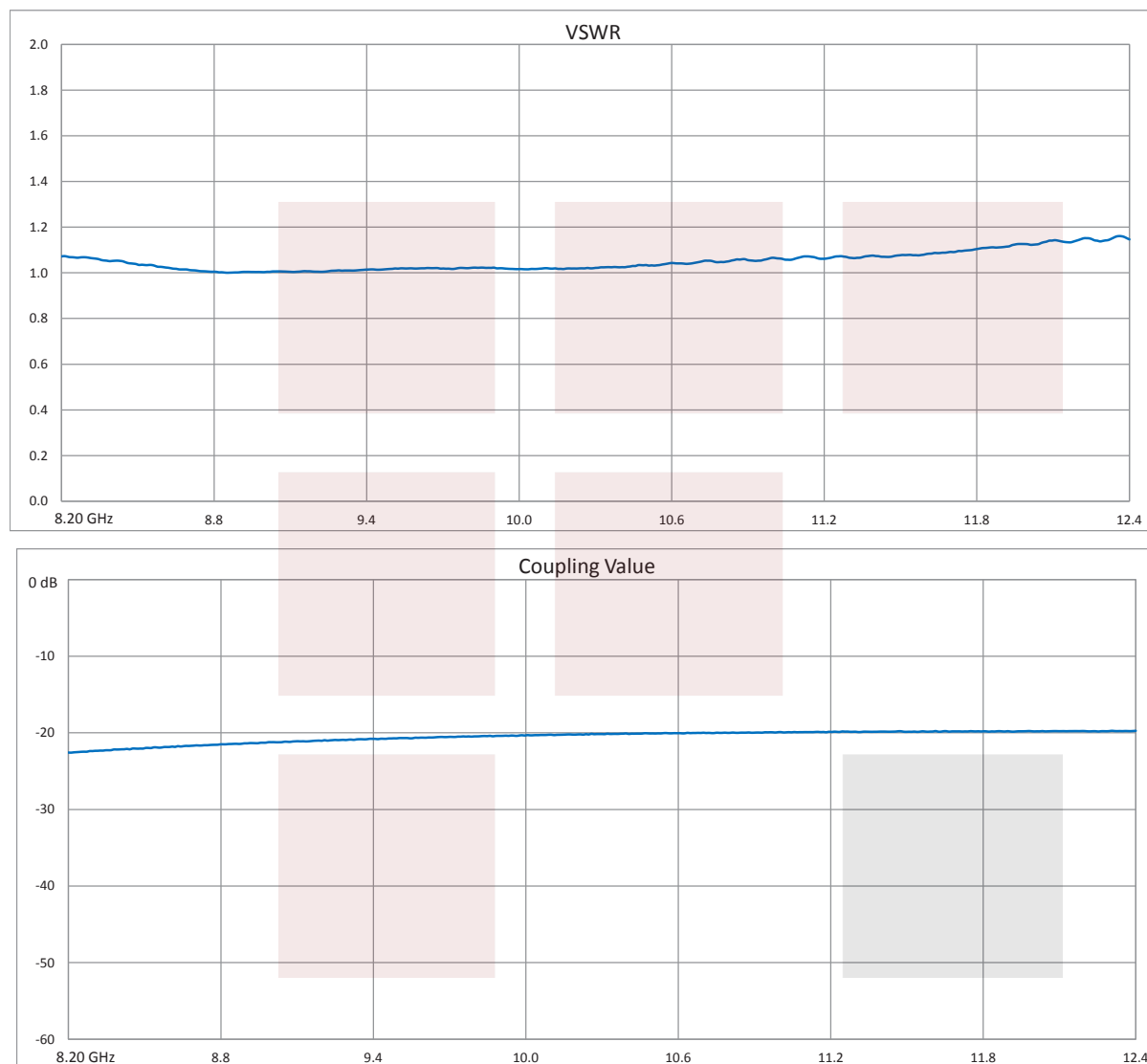
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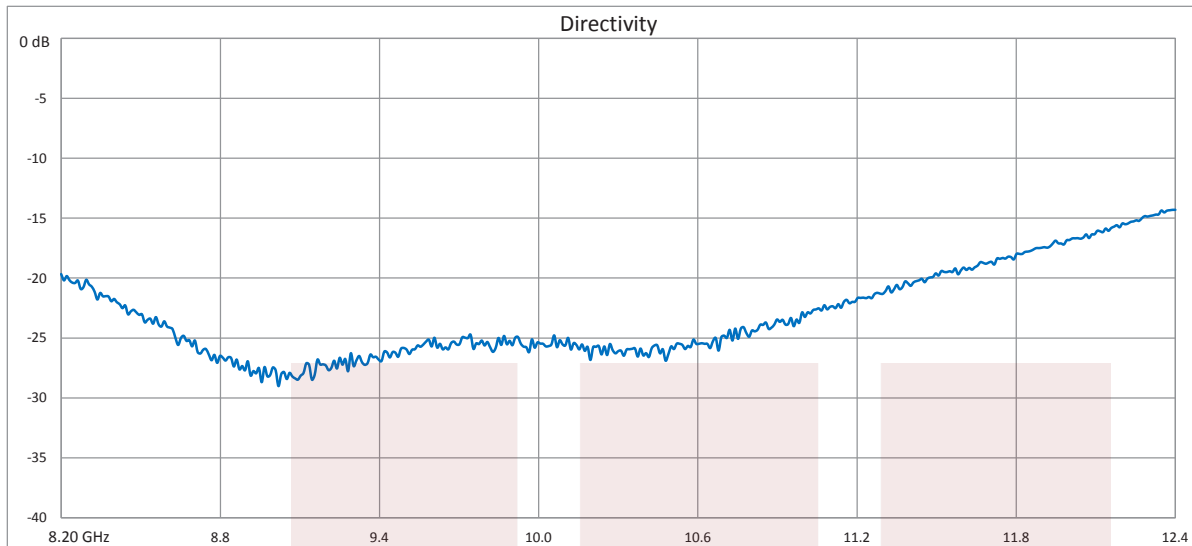
Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



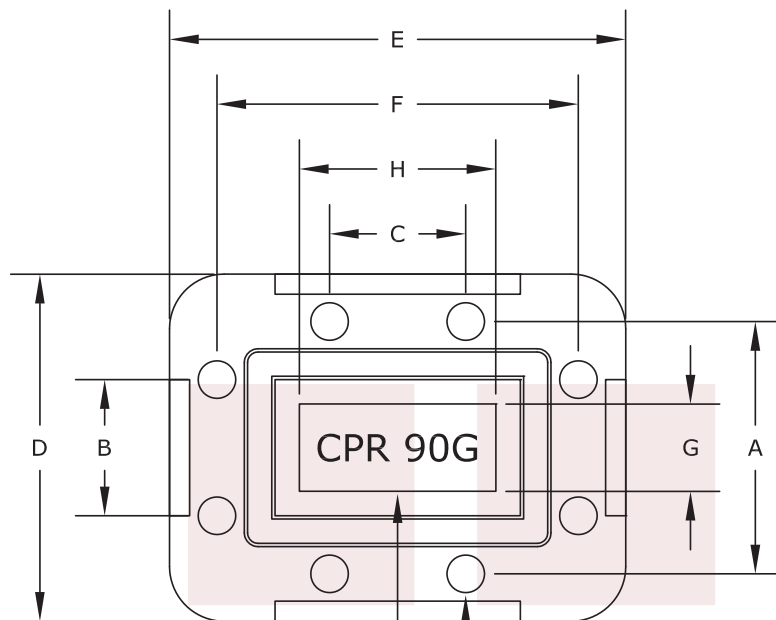


20 dB WR-90 Waveguide Crossguide Coupler With CPR-90G Grooved Flange And 8.2 GHz to 12.4 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

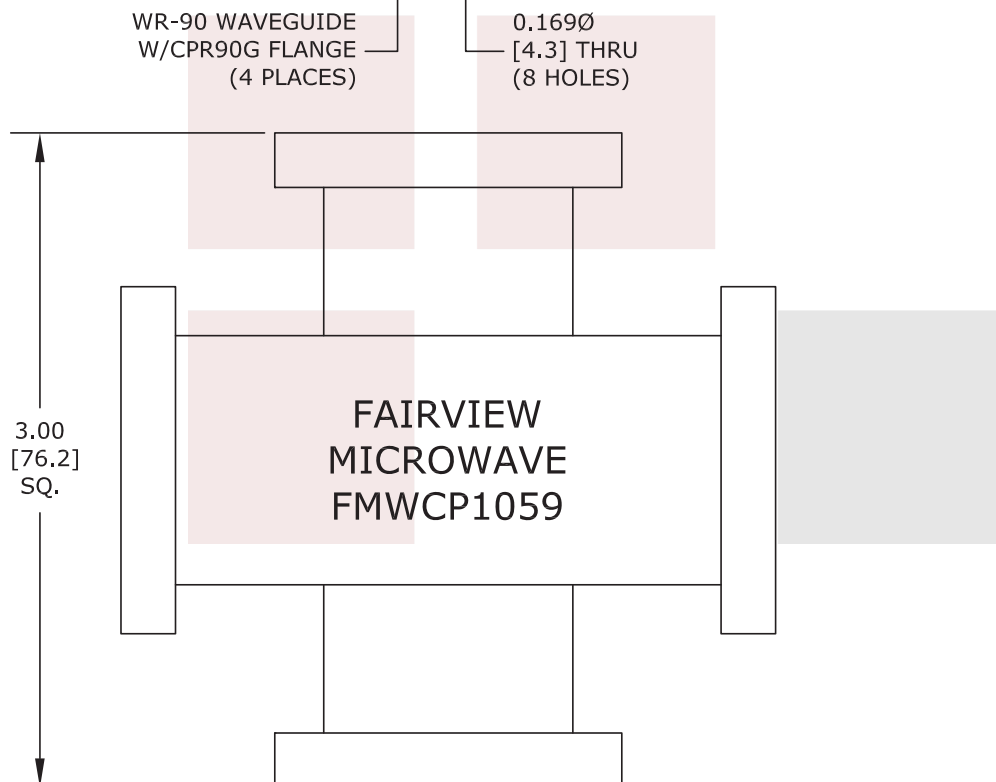
For additional information on this product, please click the following link: [20 dB WR-90 Waveguide Crossguide Coupler With CPR-90G Grooved Flange And 8.2 GHz to 12.4 GHz FMWCP1059](http://www.fairviewmicrowave.com/wr-90-20-db-waveguide-crossguide-coupler-grooved-cpr-90g-grooved-none-fmwcp1059-p.aspx)

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CPR 90G		
Dimension	Inches	mm
A	1.156	29.36
B	0.624	15.84
C	0.624	15.84
D	1.590	40.39
E	2.090	53.09
F	1.656	42.06
G	0.400	10.16
H	0.900	22.86



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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
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DWG NO		FMWCP1059		CAGE CODE		3FKR5	
CAD FILE	021816	SHEET		SCALE	N/A	SIZE	A 2233