

50 dB WR-90 Waveguide Crossguide Coupler With UG-39/U Square Cover Flange And None Coupled Port, 8.2 GHz to 12.4 GHz

The FMWCP1058 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 standard UG-39/U square cover 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
- 8.2 GHz to 12.4 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

Electrical Specifications*

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	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 3 in [76.2 mm]
 Width/Dia. 3 in [76.2 mm]
 Weight 0.97 lbs [439.98 g]

Configuration

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

Input Flange

Flange Type Square Cover
 Flange Designation UG-39/U
 Material Copper Alloy
 Plating Silver

Output Flange

Flange Type Square Cover
 Flange Designation UG-39/U
 Material Copper Alloy
 Plating Silver

Coupled Flange(s)

Flange Type Square Cover
 Flange Designation UG-39/U
 Material Copper Alloy
 Plating Silver

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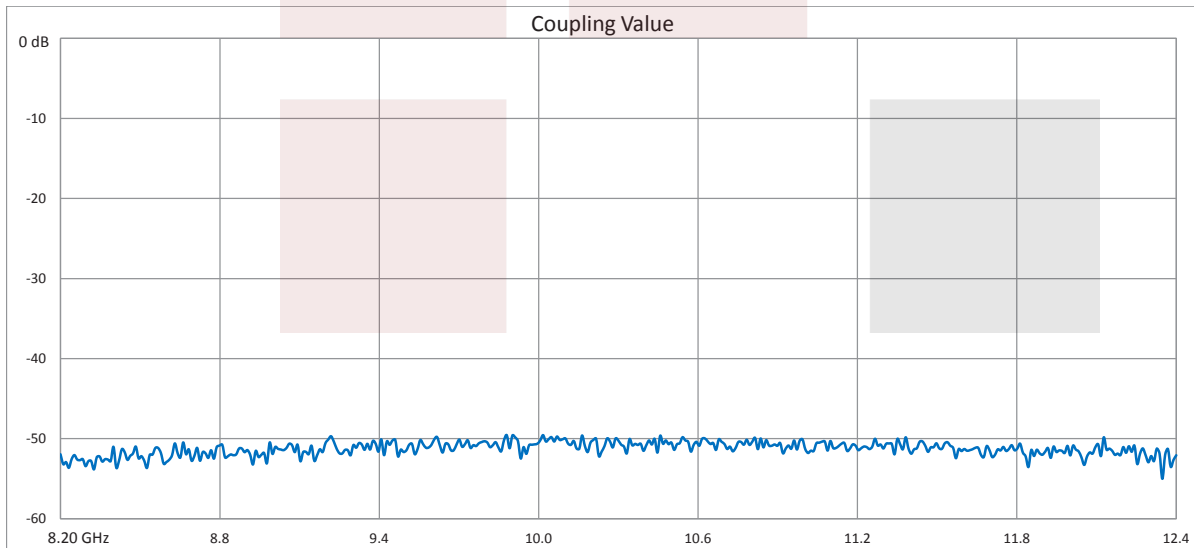
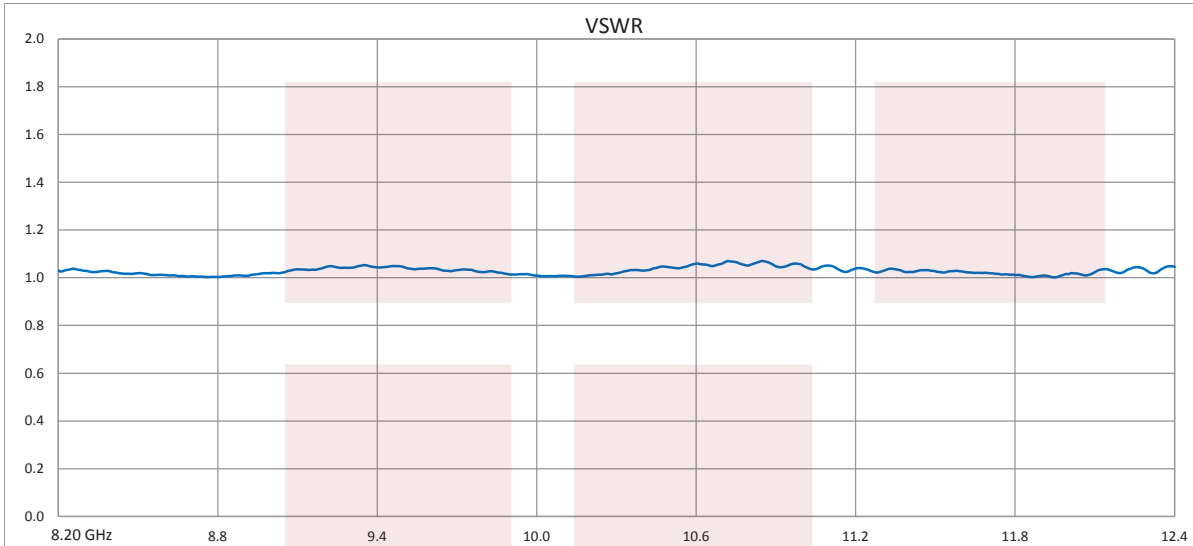
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

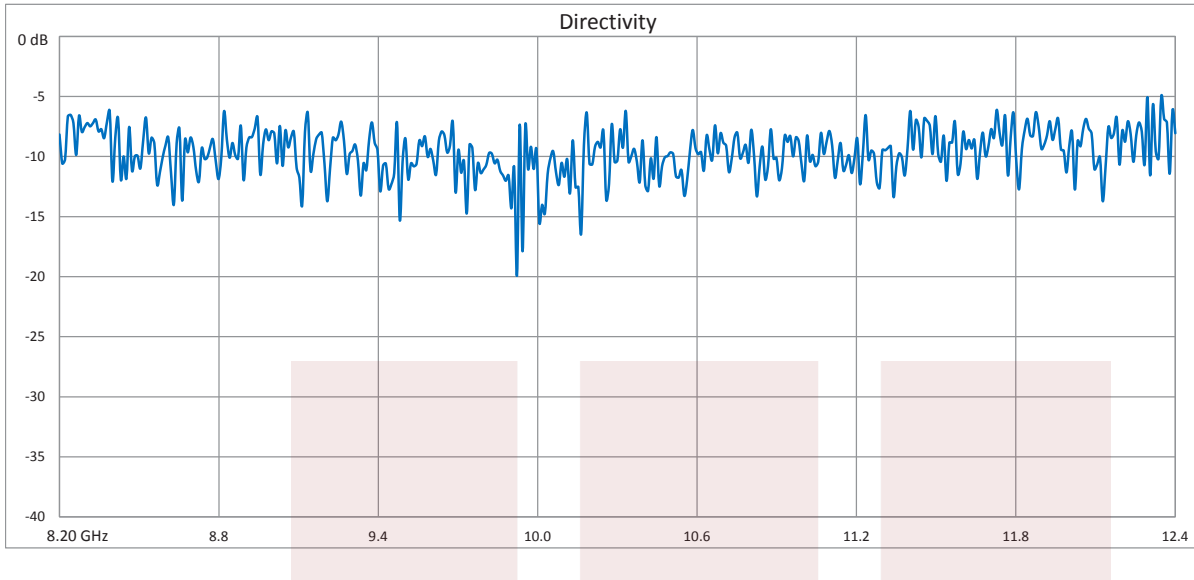
RoHS Compliant Yes
 REACH Compliant 12/17/2015

Plotted and Other Data

- Notes:
 • Values at 25 °C, sea level

Typical Performance Data



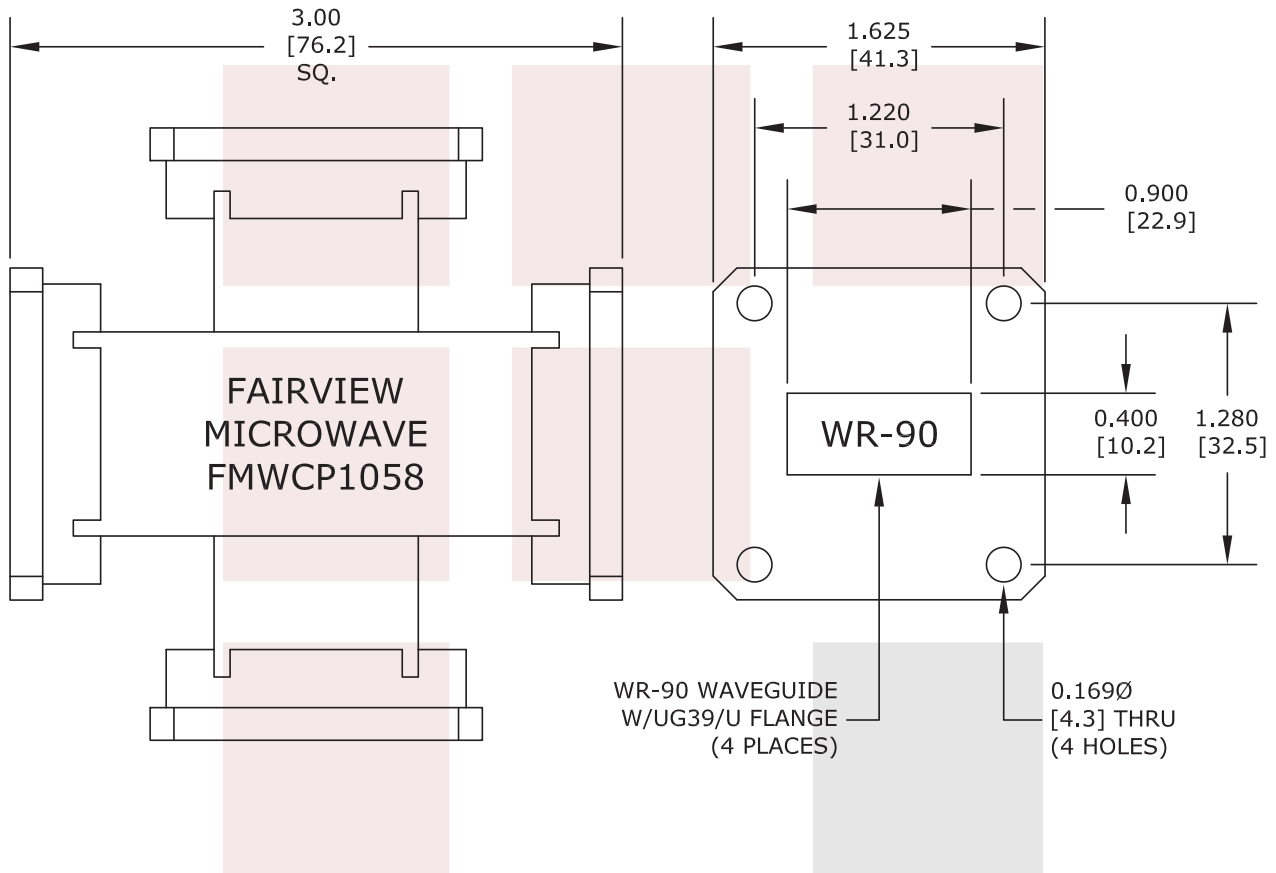


50 dB WR-90 Waveguide Crossguide Coupler With UG-39/U Square Cover Flange And None Coupled Port, 8.2 GHz to 12.4 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-90 Waveguide Crossguide Coupler With UG-39/U Square Cover Flange And None Coupled Port, 8.2 GHz to 12.4 GHz FMWCP1058](http://www.fairviewmicrowave.com/wr-90-50-db-waveguide-crossguide-coupler-ug39-square-none-fmwcp1058-p.aspx)

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TITLE 50 dB WR-90 Waveguide Crossguide Coupler With UG-39/U Square Cover Flange And None Coupled Port, 8.2 GHz to 12.4 GHz		DWG NO FMWCP1058		CAGE CODE 3FKR5	
CAD FILE	021816	SHEET	SCALE	N/A	SIZE A 2233