

50 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz

The FMWCP1066 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 standard UG-51/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
- 7.05 GHz to 10 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

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 1.82 lbs [825.54 g]

Configuration

Design None Crossguide
 Size WR-112
 Waveguide Material and Plating Copper Alloy, Silver

Input Flange

Flange Type Square Cover
 Flange Designation UG-51/U
 Material Copper Alloy
 Plating Silver

Output Flange

Flange Type Square Cover
 Flange Designation UG-51/U
 Material Copper Alloy
 Plating Silver

Coupled Flange(s)

Flange Type Square Cover
 Flange Designation UG-51/U
 Material Copper Alloy
 Plating Silver

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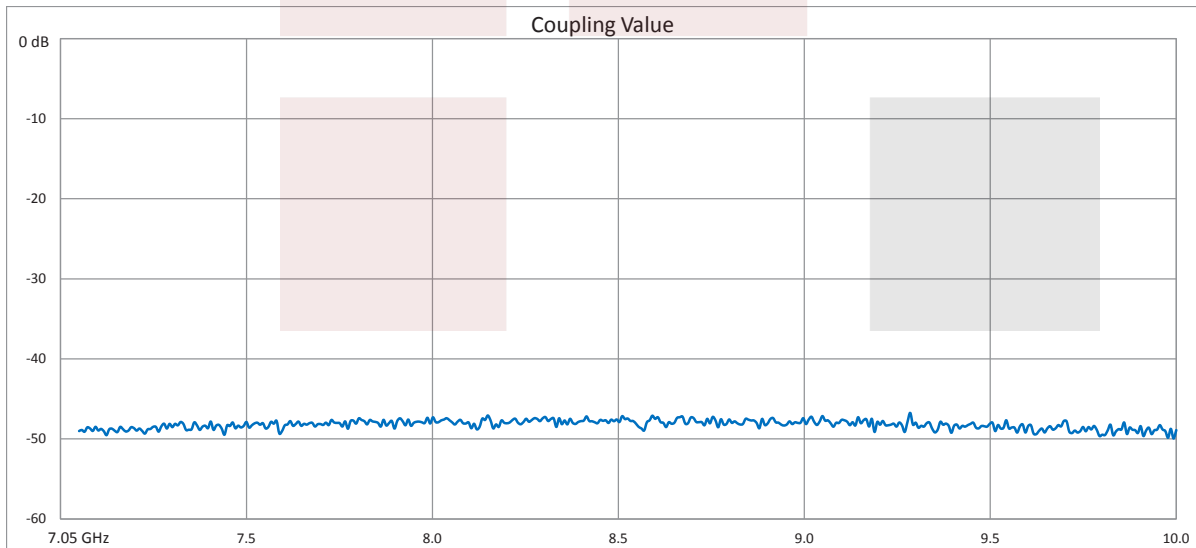
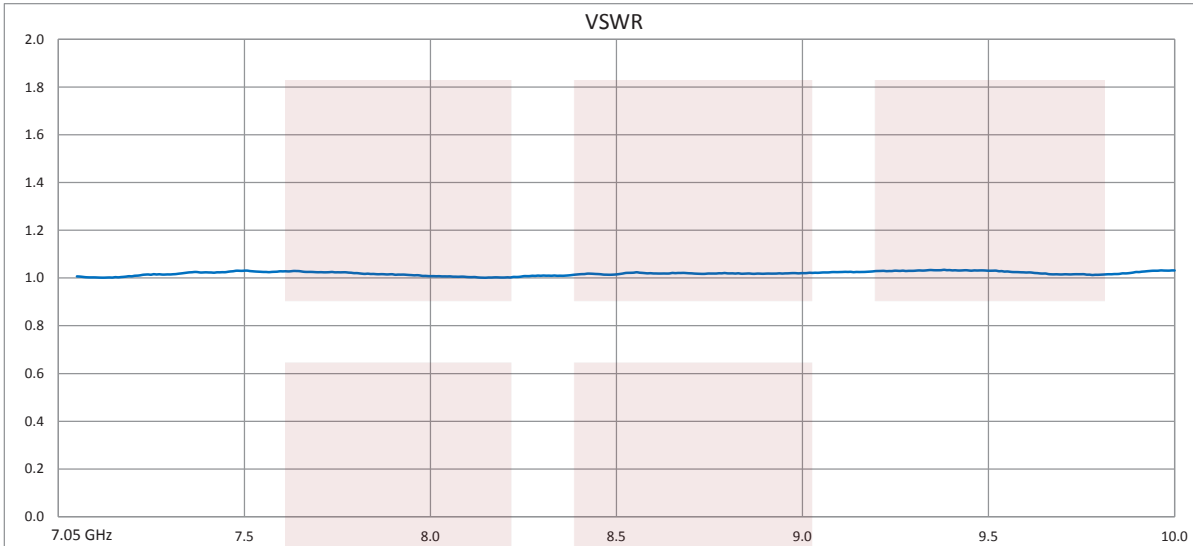
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

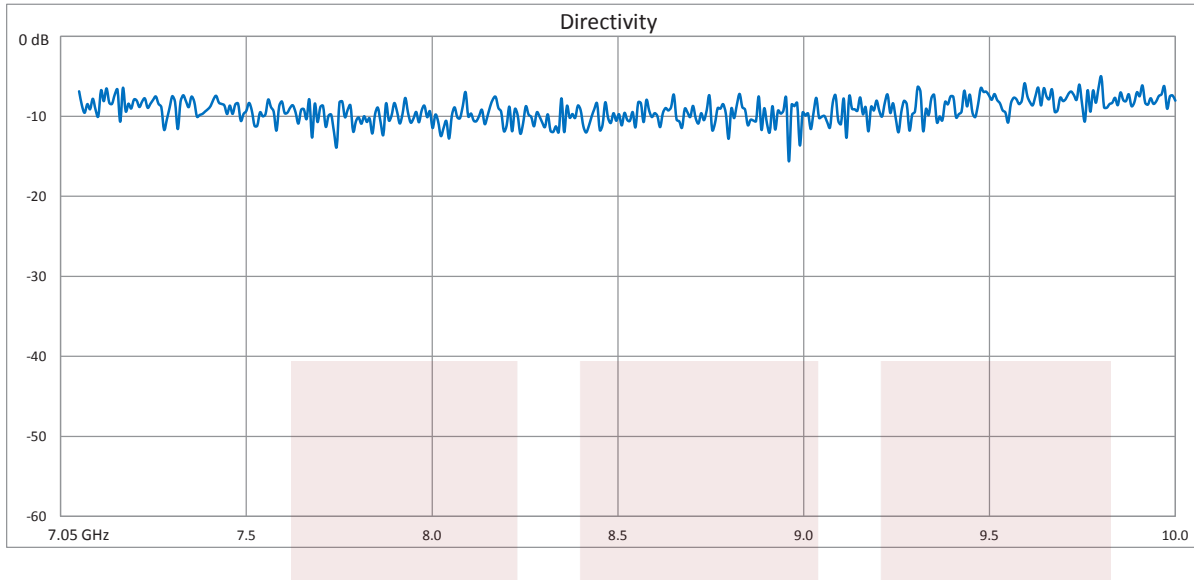
RoHS Compliant Yes
 REACH Compliant 12/17/2015

Plotted and Other Data

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

Typical Performance Data



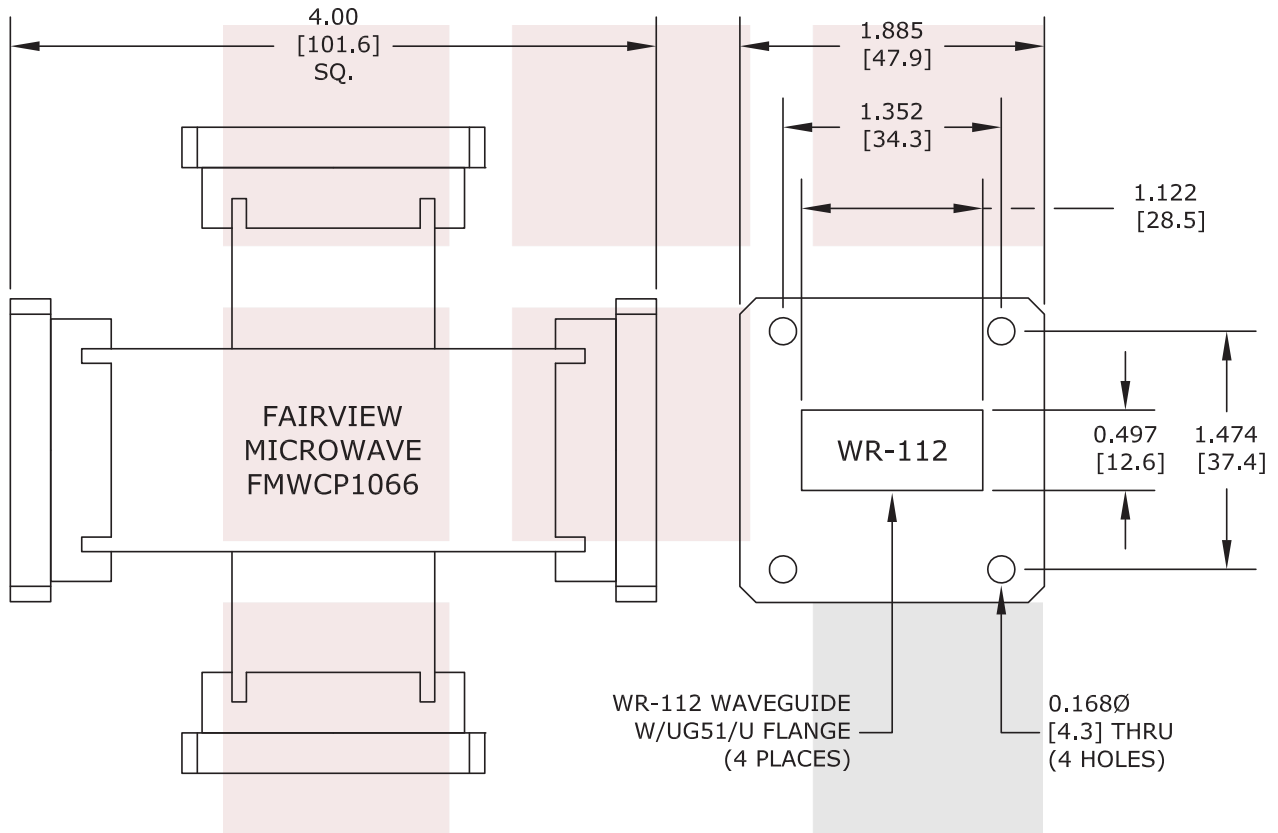


50 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz FMWCP1066](#)

URL: <http://www.fairviewmicrowave.com/wr-112-50-db-waveguide-crossguide-coupler-ug51-square-none-fmwcp1066-p.aspx>

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TITLE 50 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz		DWG NO FMWCP1066		CAGE CODE 3FKR5	
CAD FILE	021816	SHEET	SCALE	N/A	SIZE A 2233