

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

The FMWCP1064 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
- 30 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		25		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		30		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 1.8 lbs [816.47 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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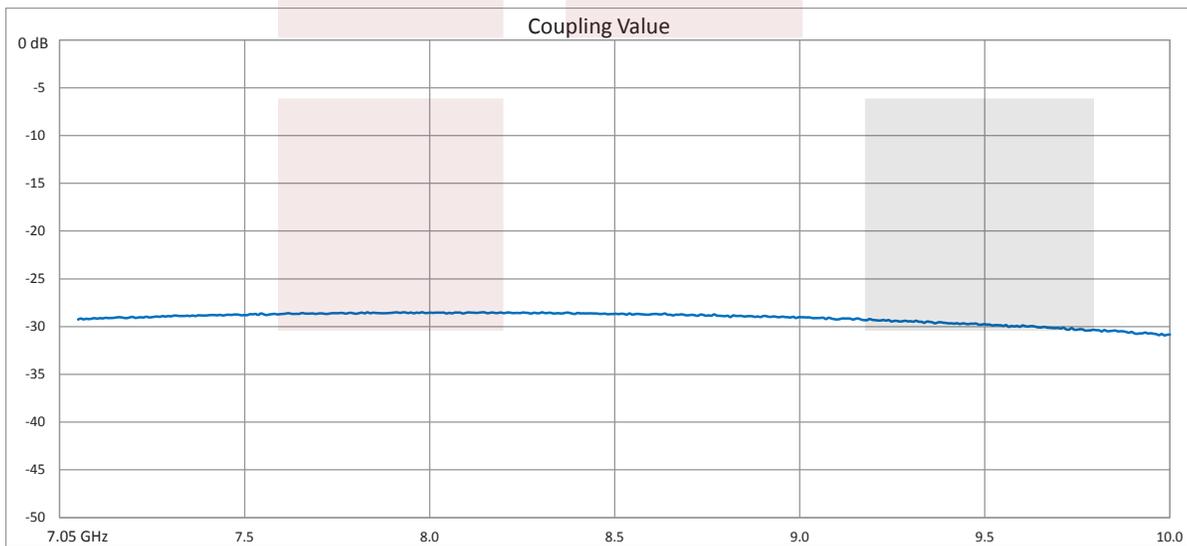
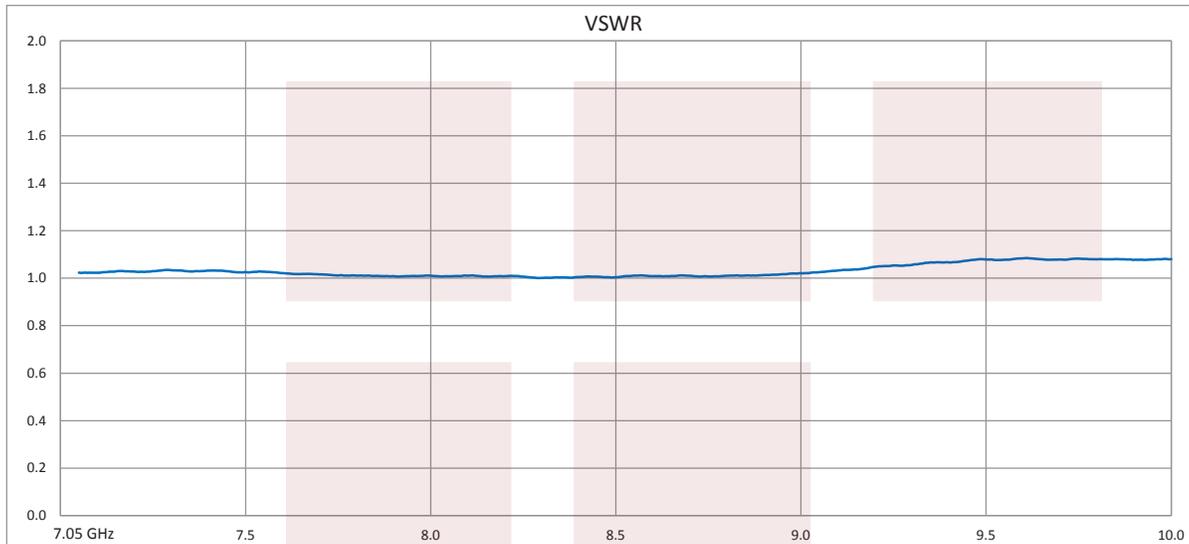
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

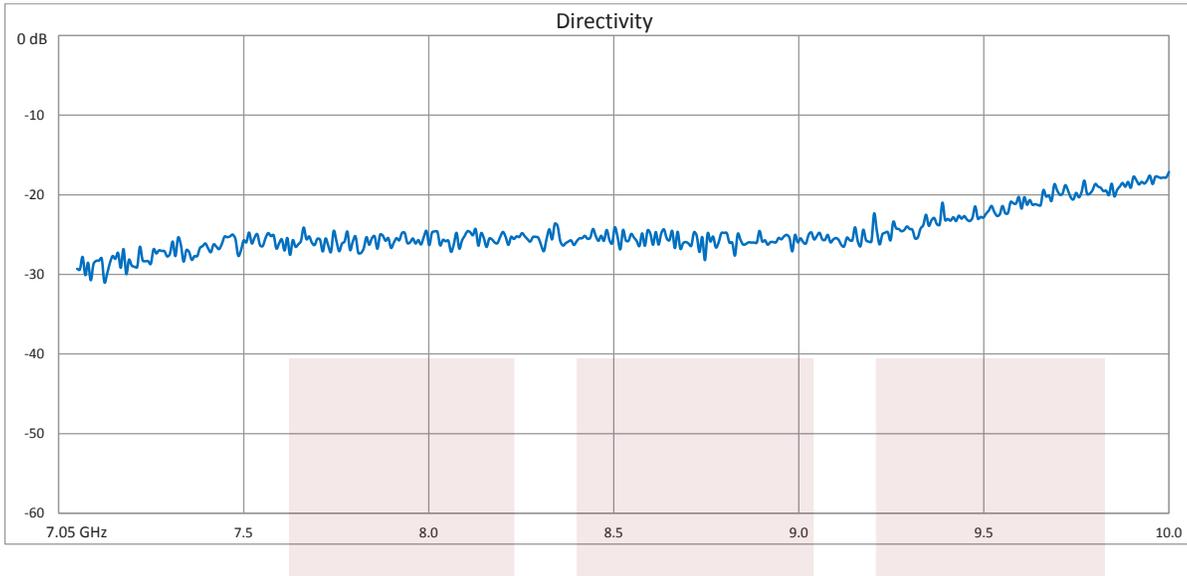
RoHS Compliant Yes  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

Notes:  
 • Values at 25 °C, sea level

**Typical Performance Data**



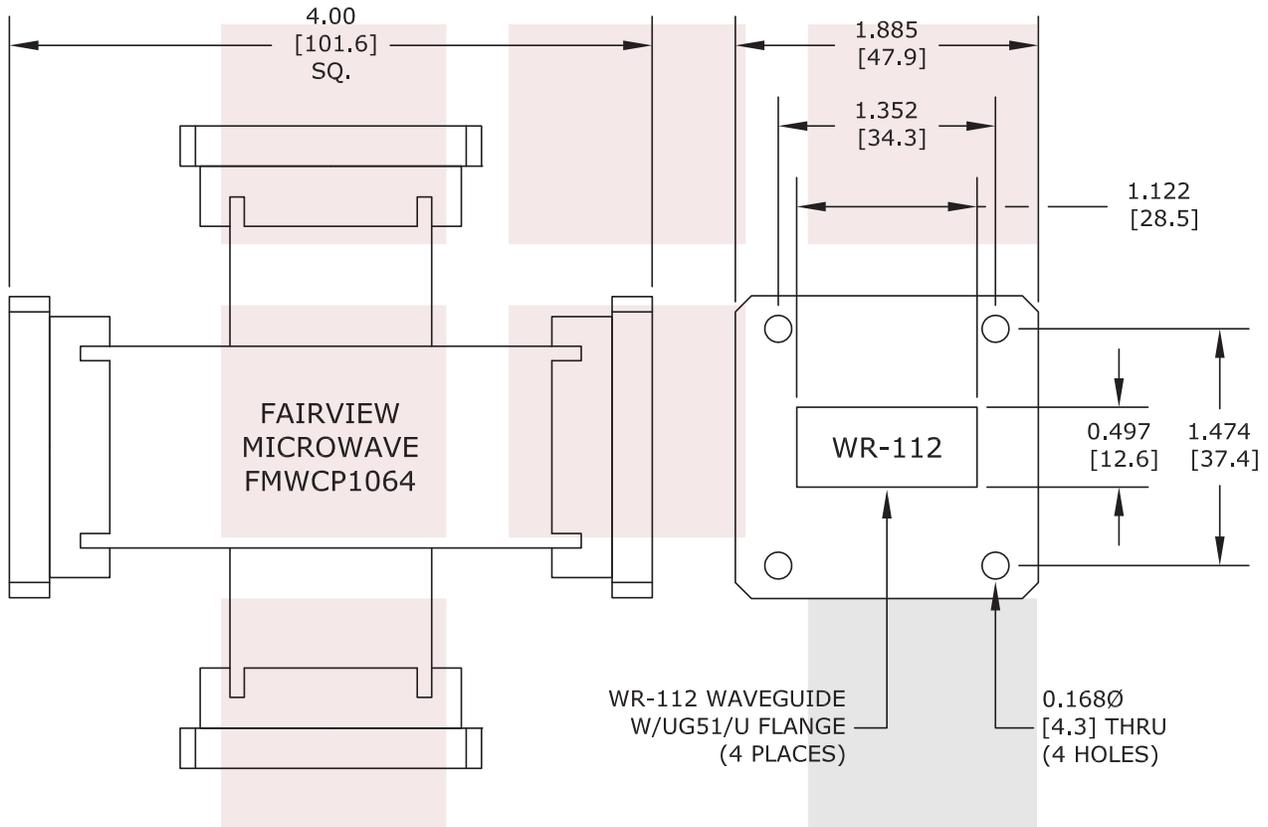


30 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave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

For additional information on this product, please click the following link: [30 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz FMWCP1064](#)

URL: <http://www.fairviewmicrowave.com/wr-112-30-db-waveguide-crossguide-coupler-ug51-square-none-fmwcp1064-p.aspx>

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<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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 30 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz		DWG NO FMWCP1064		CAGE CODE 3FKR5	
CAD FILE	021816	SHEET	SCALE	N/A	SIZE A 2233