

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

The FMWCP1063 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.



**Electrical Specifications\***

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
Directivity		45		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**

<b>Size</b>	
Length	4 in [101.6 mm]
Width/Dia.	4 in [101.6 mm]
Weight	1.81 lbs [821 g]
<b>Configuration</b>	
Design	None Crossguide
Size	WR-112
Waveguide Material and Plating	Copper Alloy, Silver
<b>Input Flange</b>	
Flange Type	Square Cover
Flange Designation	UG-51/U
Material	Copper Alloy
Plating	Silver
<b>Output Flange</b>	
Flange Type	Square Cover
Flange Designation	UG-51/U
Material	Copper Alloy
Plating	Silver
<b>Coupled Flange(s)</b>	
Flange Type	Square Cover
Flange Designation	UG-51/U
Material	Copper Alloy
Plating	Silver

**Features:**

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

**Applications:**

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

Fairview Microwave  
 1130 Junction Dr. #100  
 Allen, TX 75013  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

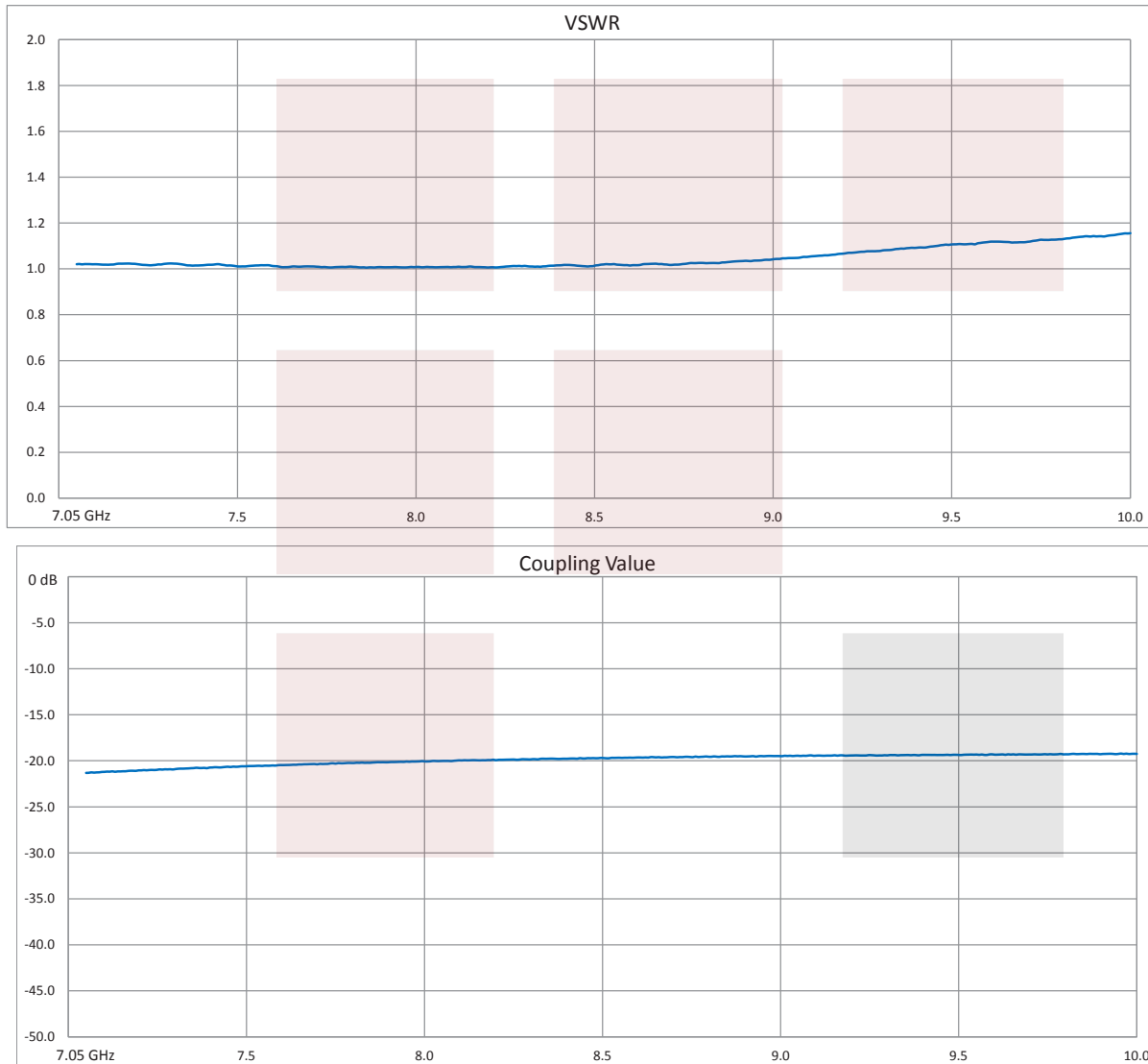
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

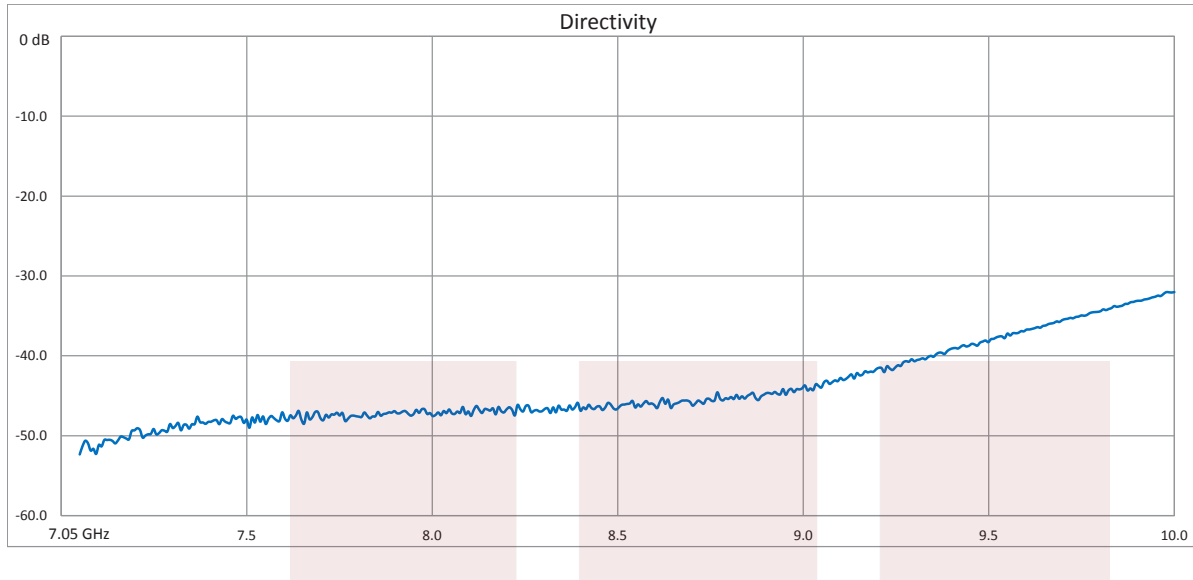
RoHS Compliant Yes  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

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

**Typical Performance Data**



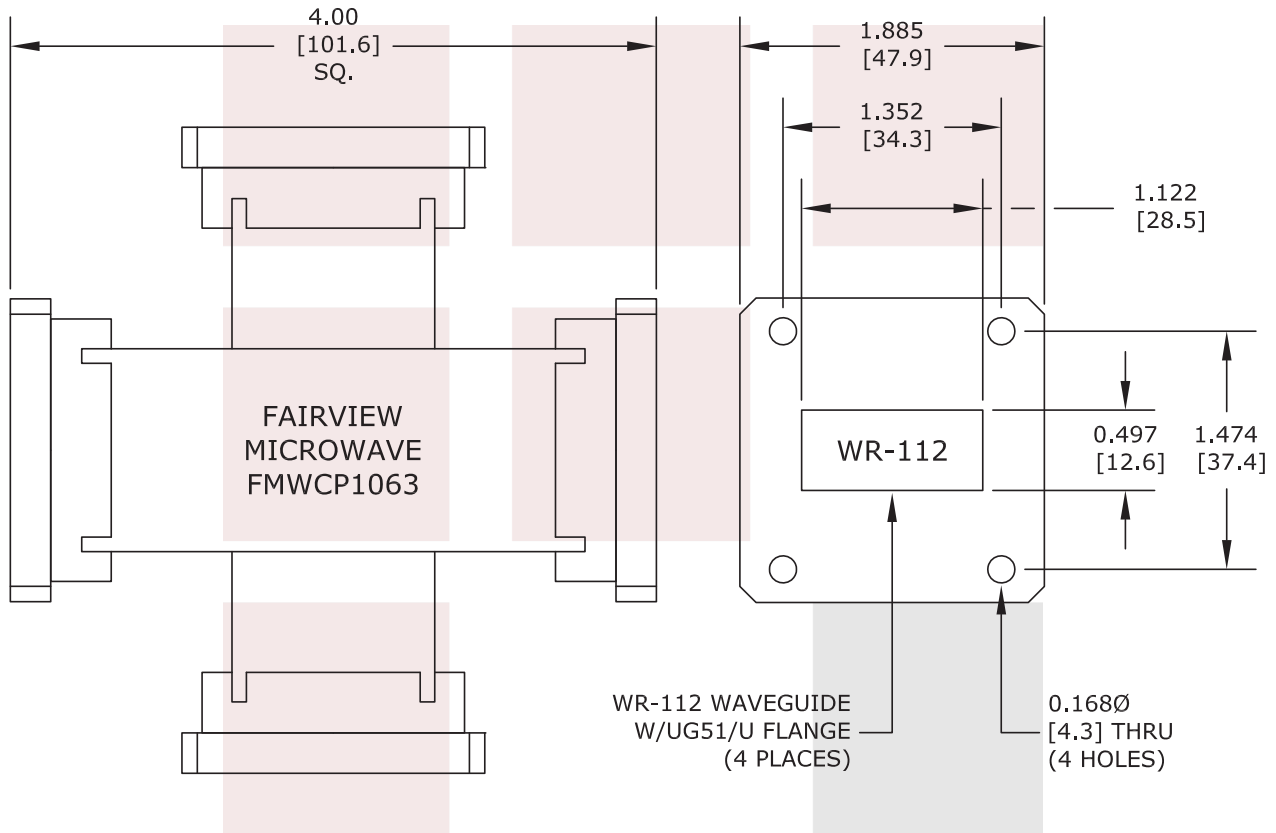


20 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave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

For additional information on this product, please click the following link: [20 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz FMWCP1063](#)

URL: <http://www.fairviewmicrowave.com/wr-112-20-db-waveguide-crossguide-coupler-ug51-square-none-fmwcp1063-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.



<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 20 dB WR-112 Waveguide Crossguide Coupler With UG-51/U Square Cover Flange And 7.05 GHz to 10 GHz		DWG NO <b>FMWCP1063</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	021816	SHEET	SCALE	N/A	SIZE A 2233