

## 30 dB WR-112 Directional Waveguide Broadwall Coupler With UG-51/U Square Cover Flange and E-Plane Coupled Port from 7.05 GHz to 10 GHz

The FMWCP1025 is a WR-112 Directional Broadwall 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 broad wall configuration that result in a mid-band nominal coupling value of 10, 20, or 30 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. Fairview Microwave offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

### Electrical Specifications\*

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
Directivity		40		dB
Insertion Loss		0.15		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		30		dB

\* Values at 25°C, sea level

### Mechanical Specifications

#### Size

Length	18.62 in [472.95 mm]
Height	3.997 in [101.52 mm]
Weight	3.12 lbs [1.42 Kg]

#### Configuration

Design	Directional E-Plane Broadwall
Size	WR-112

#### 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

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

RoHS Compliant	Yes
REACH Compliant	12/17/2015



### Features:

- Broadwall Waveguide Coupler
- 30 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

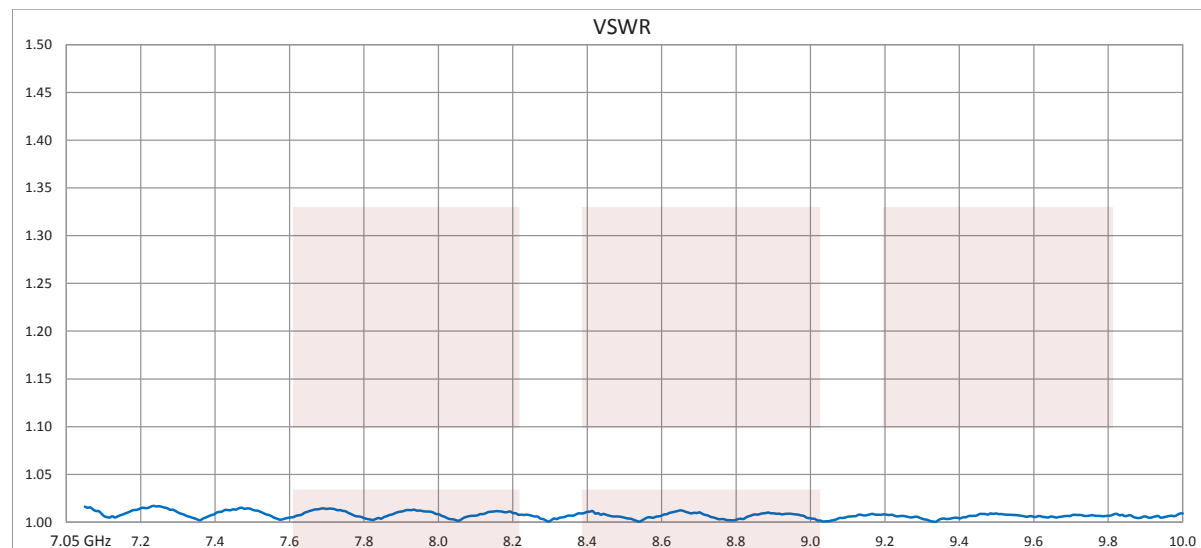
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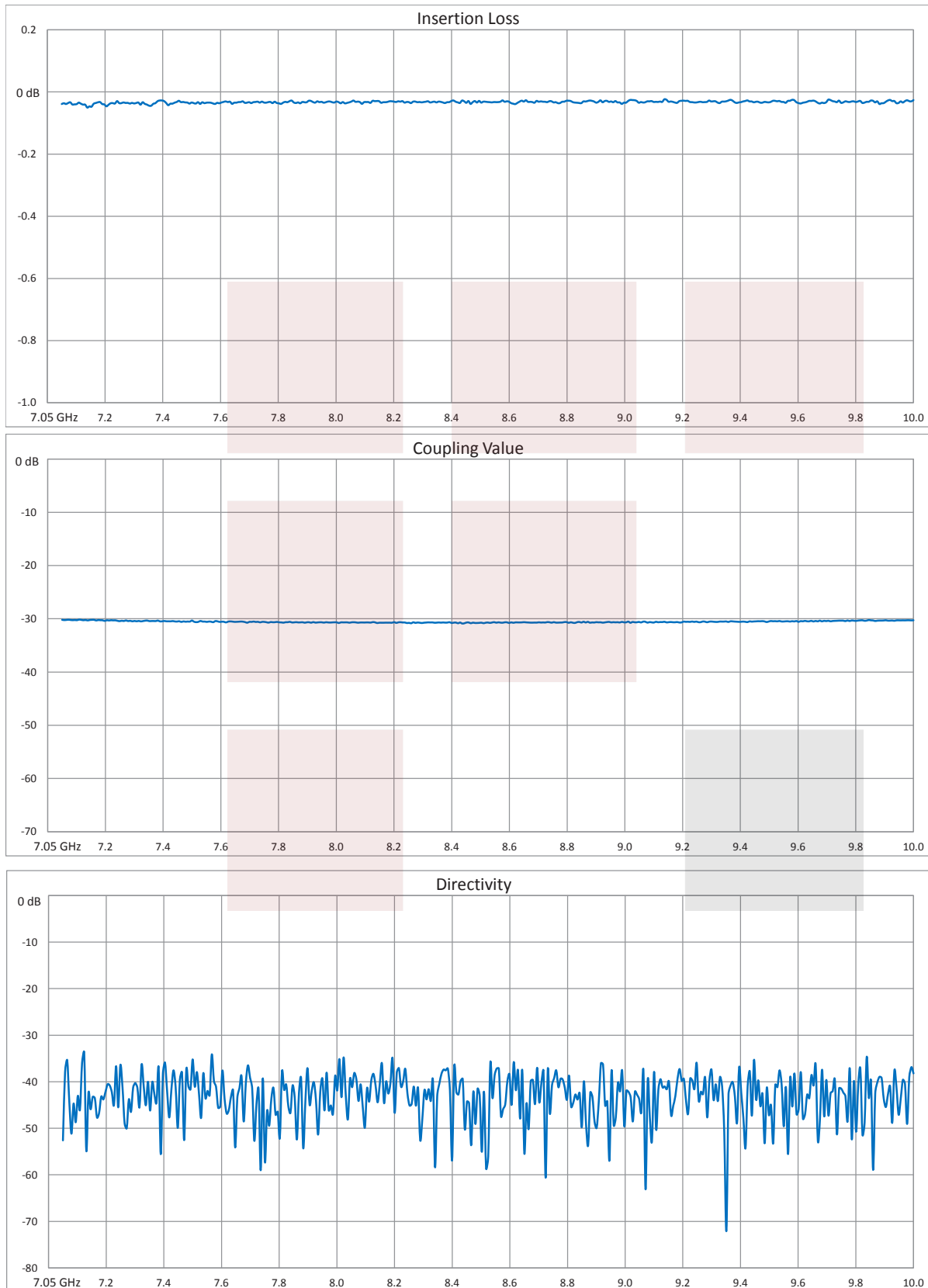
## Plotted and Other Data

Notes:

- Values at 25 °C, sea level

## Typical Performance Data



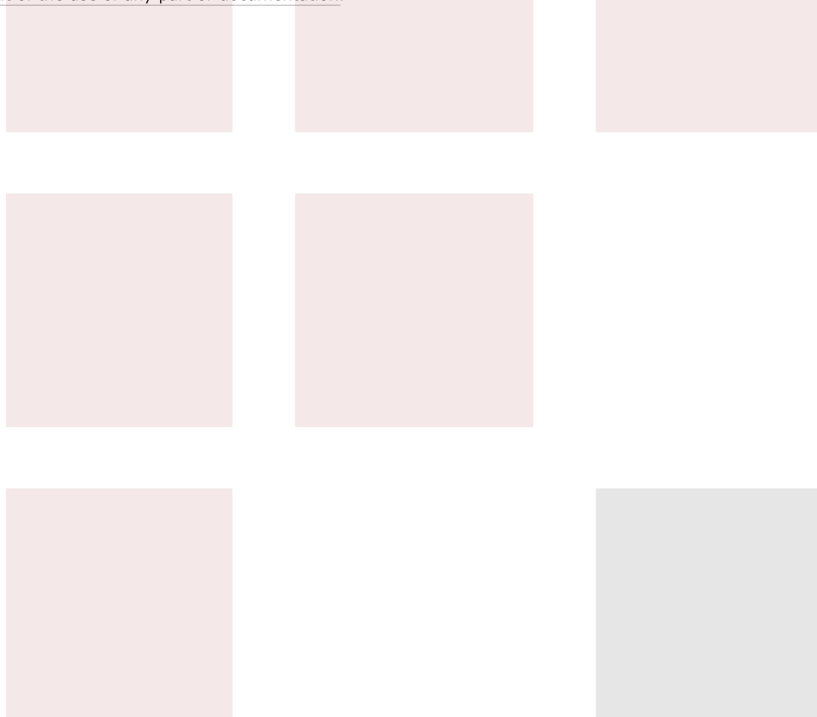


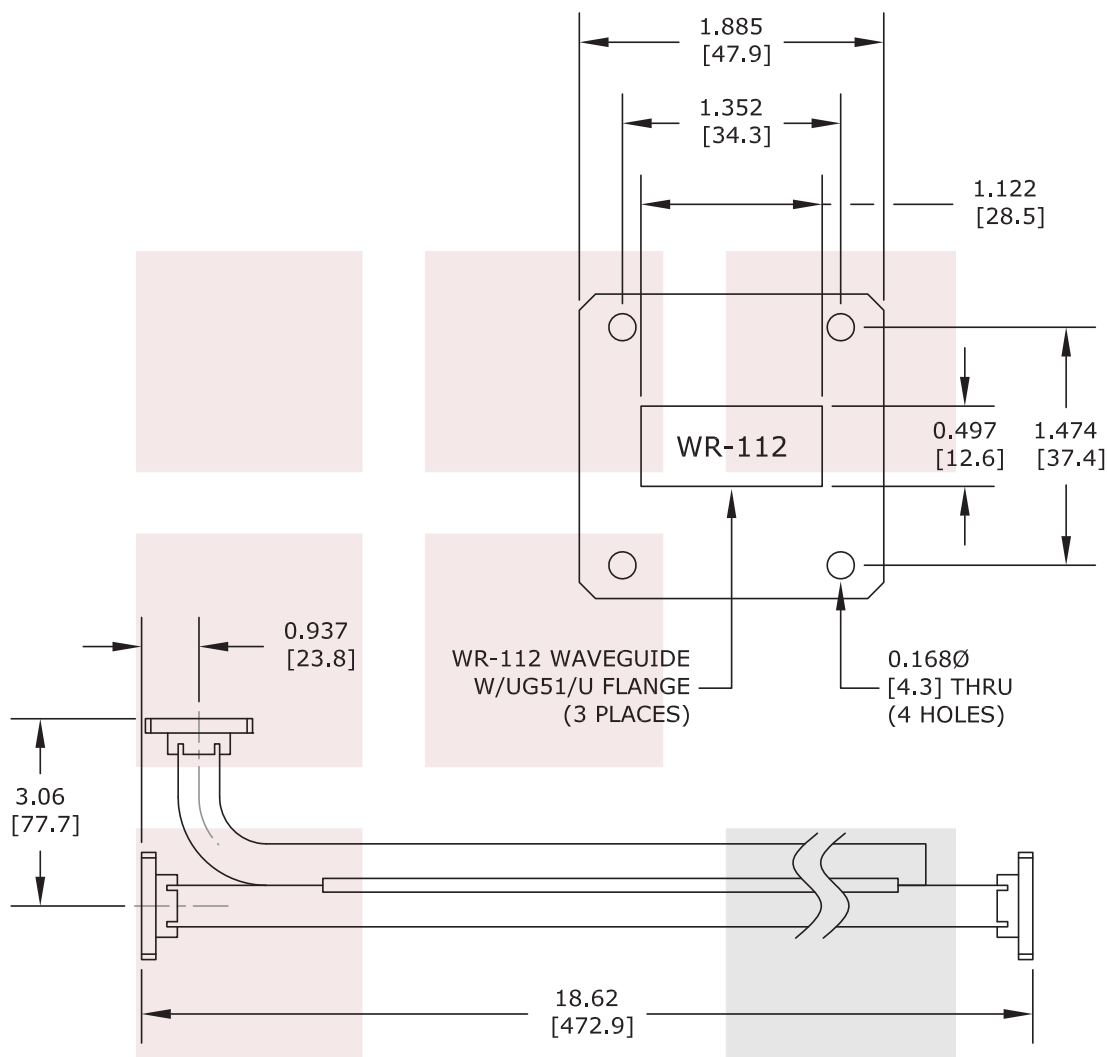
30 dB WR-112 Directional Waveguide Broadwall Coupler With UG-51/U Square Cover Flange and E-Plane Coupled Port from 7.05 GHz to 10 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities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

For additional information on this product, please click the following link: [30 dB WR-112 Directional Waveguide Broadwall Coupler With UG-51/U Square Cover Flange and E-Plane Coupled Port from 7.05 GHz to 10 GHz FMWCP1025](http://www.fairviewmicrowave.com/30-db-wr-112-directional-waveguide-broadwall-coupler-ug51-square-e-fmw-cp1025-p.aspx)

URL: <http://www.fairviewmicrowave.com/30-db-wr-112-directional-waveguide-broadwall-coupler-ug51-square-e-fmw-cp1025-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.





UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.

DECIMALS ANGLES  
.X ±.030 ±1/2 DEG.  
.XX ±.015 FRACTIONS  
.XXX ±.005 ±1/32

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

<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 Directional Waveguide Broadwall Coupler With UG-51/U Square Cover Flange and E-Plane Coupled Port from 7.05 GHz to 10 GHz		DWG NO <b>FMWCP1025</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	041316	SHEET	SCALE	N/A	SIZE A 2233