

50 dB WR-51 Waveguide Crossguide Coupler With Square Cover Flange And None Coupled Port, 15 GHz to 22 GHz

The FMWCP1046 is a WR-51 crossguide waveguide coupler that operates in the frequency range of 15 to 22 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-51 waveguide coupler uses standard 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	15		22	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

Mechanical Specifications

Size

Length	2.5 in [63.5 mm]
Width/Dia.	2.5 in [63.5 mm]
Weight	0.6 lbs [272.16 g]

Configuration

Design	None Crossguide
Size	WR-51
Waveguide Material and Plating	Copper Alloy, Silver

Input Flange

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

Output Flange

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

Coupled Flange(s)

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

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

RoHS Compliant	Yes
REACH Compliant	12/17/2015



Features:

- Crossguide Waveguide Coupler
- 50 dB Nominal Coupling Level
- 15 GHz to 22 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

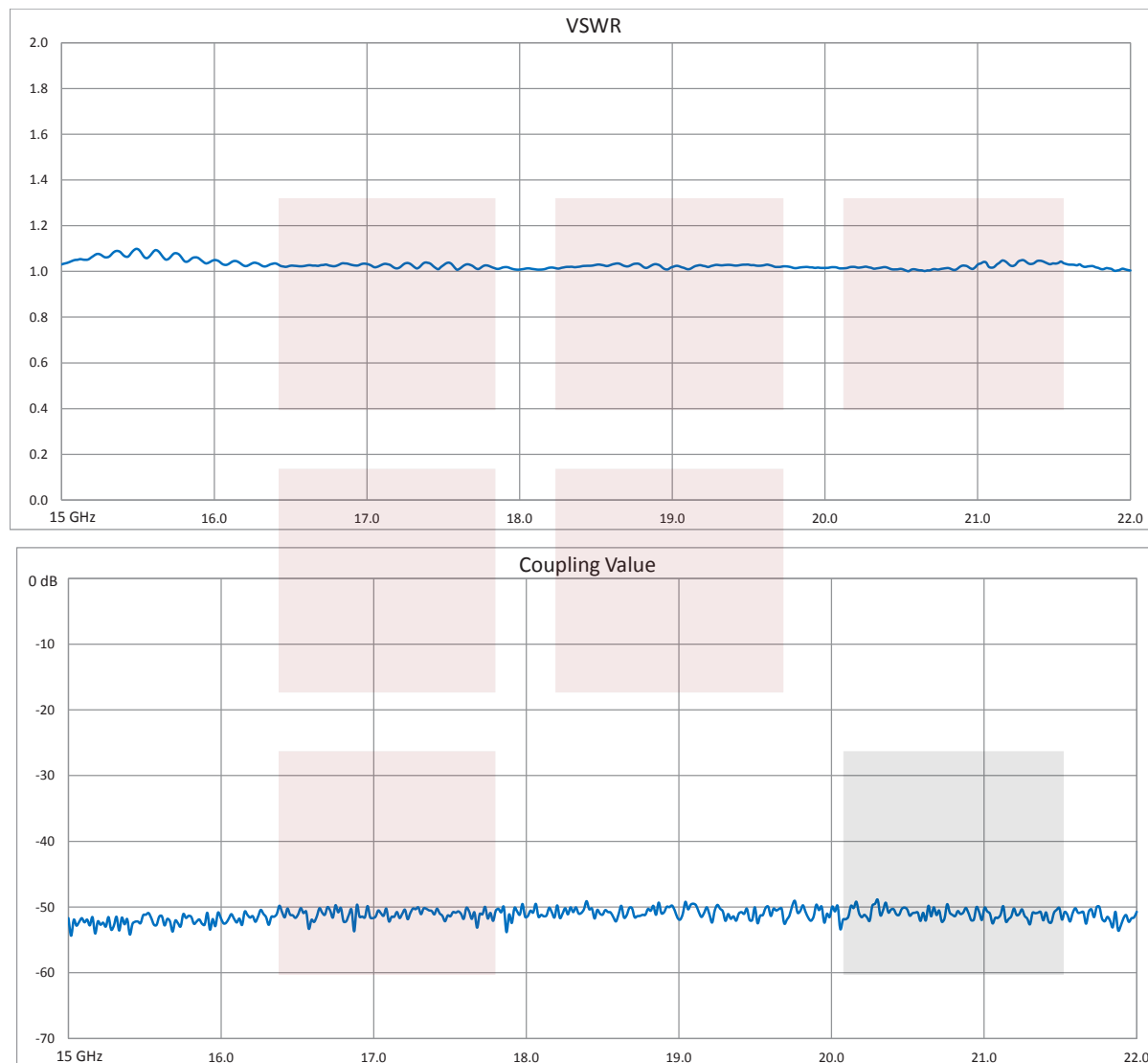
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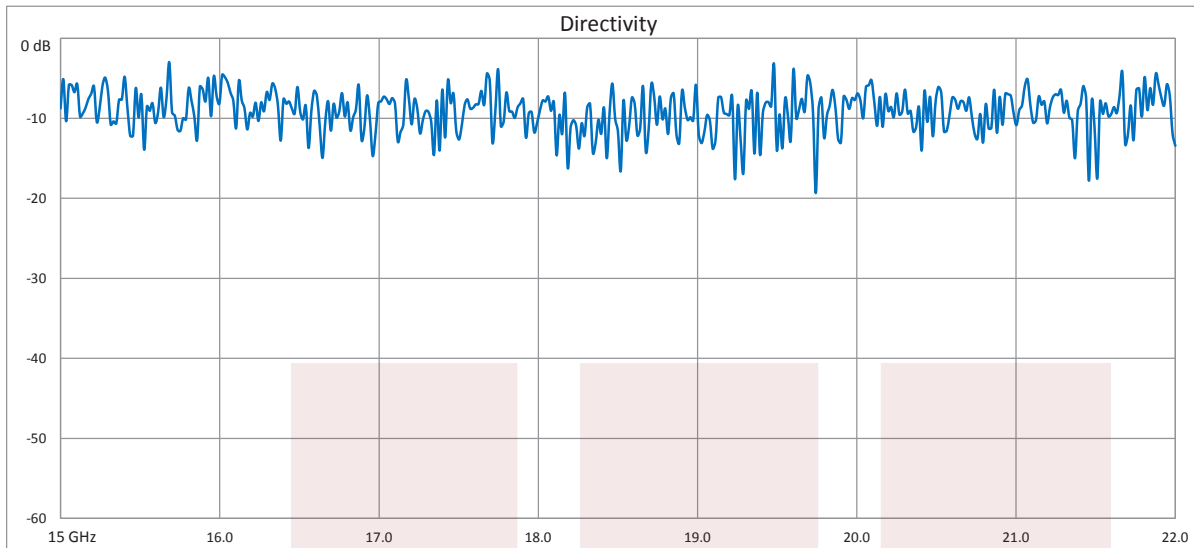
Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



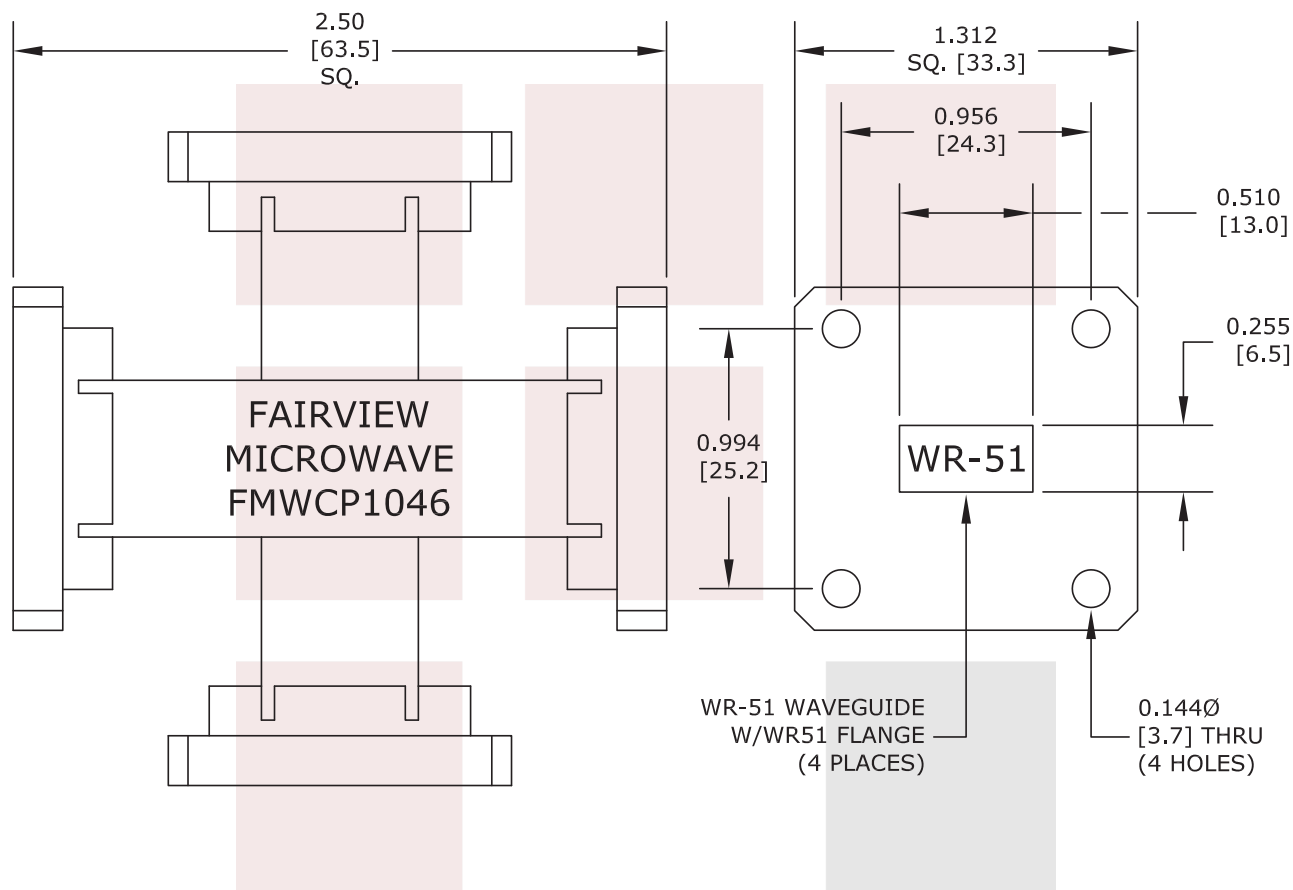


50 dB WR-51 Waveguide Crossguide Coupler With Square Cover Flange And None Coupled Port, 15 GHz to 22 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-51 Waveguide Crossguide Coupler With Square Cover Flange And None Coupled Port, 15 GHz to 22 GHz FMWCP1046](http://www.fairviewmicrowave.com/wr-51-50-db-waveguide-crossguide-coupler-square-none-fmwcp1046-p.aspx)

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TITLE 50 dB WR-51 Waveguide Crossguide Coupler With Square Cover Flange And Non Coupled Port, 15 GHz to 22 GHz	DWG NO FMWCP1046		CAGE CODE 3FKR5		
	CAD FILE 030216	SHEET	SCALE N/A	SIZE A	2233