

50 dB WR-42 Waveguide Crossguide Coupler With UG-595/U Square Cover Flange And None Coupled Port, 18 GHz to 26.5 GHz

The FMWCP1042 is a WR-42 crossguide waveguide coupler that operates in the frequency range of 18 to 26.5 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-42 waveguide coupler uses standard UG-595/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	18		26.5	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	0.25 lbs [113.4 g]

Configuration

Design	None Crossguide
Size	WR-42
Waveguide Material and Plating	Copper Alloy, Silver

Input Flange

Flange Type	Square Cover
Flange Designation	UG-595/U
Material	Copper Alloy
Plating	Silver

Output Flange

Flange Type	Square Cover
Flange Designation	UG-595/U
Material	Copper Alloy
Plating	Silver

Coupled Flange(s)

Flange Type	Square Cover
Flange Designation	UG-595/U
Material	Copper Alloy
Plating	Silver



Features:

- Crossguide Waveguide Coupler
- 50 dB Nominal Coupling Level
- 18 GHz to 26.5 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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Compliance Certifications (visit www.FairviewMicrowave.com for current document)

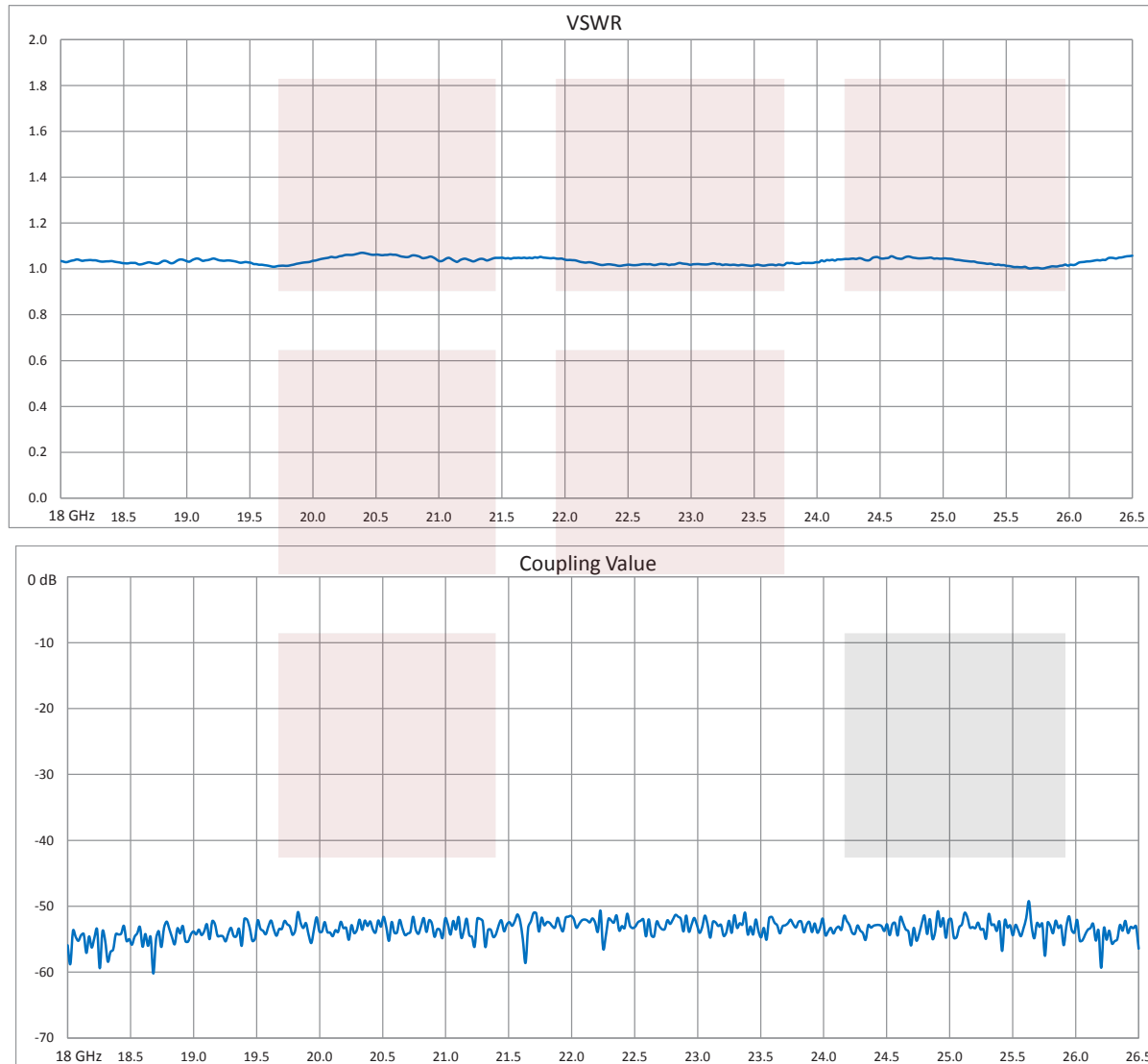
RoHS Compliant Yes
REACH Compliant 12/17/2015

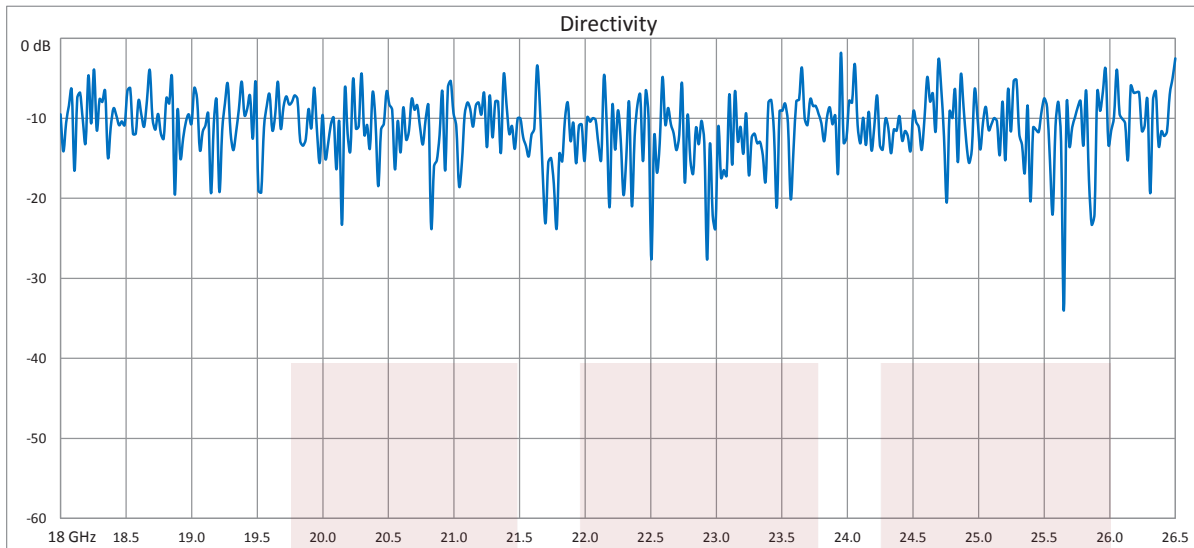
Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data



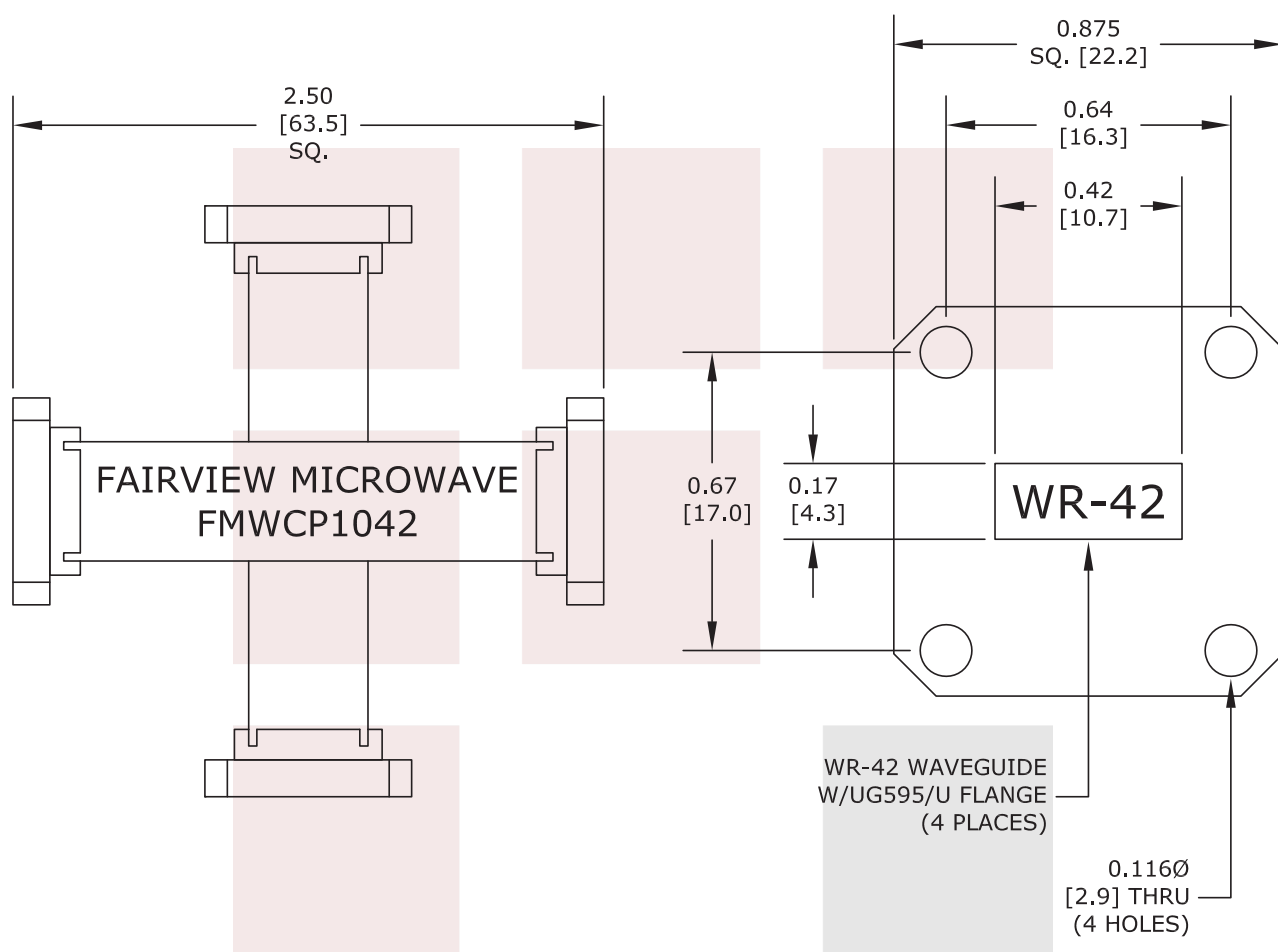


50 dB WR-42 Waveguide Crossguide Coupler With UG-595/U Square Cover Flange And None Coupled Port, 18 GHz to 26.5 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-42 Waveguide Crossguide Coupler With UG-595/U Square Cover Flange And None Coupled Port, 18 GHz to 26.5 GHz FMWCP1042](http://www.fairviewmicrowave.com/wr-42-50-db-waveguide-crossguide-coupler-ug595-square-none-fmwcp1042-p.aspx)

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TITLE 50 dB WR-42 Waveguide Crossguide Coupler With UG-595/U Square Cover Flange And None Coupled Port, 18 GHz to 26.5 GHz	DWG NO FMWCP1042		CAGE CODE 3FKR5		
	CAD FILE 030816	SHEET	SCALE N/A	SIZE A	2233