

# FMWCP1073 DATA SHEET

# 40 dB WR-137 Waveguide Crossguide Coupler With UG-344/U Round Cover Flange And 5.85 GHz to 8.2 GHz

The FMWCP1073 is a WR-137 crossguide waveguide coupler that operates in the frequency range of 5.85 to 8.2 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 maintransmission line. This WR-137 waveguide coupler uses standard UG-344/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	Тур	Max	Units	
Frequency Range	5.85		8.2	GHz	
Directivity		20		dB	
Insertion Loss		0.1		dB	
Main Line VSWR		1.05:1			
Nominal Coupling Level		40		dB	

<sup>\*</sup> Values at 25°C, sea level

#### **Mechanical Specifications**

Size

 Length
 5 in [127 mm]

 Width/Dia.
 5 in [127 mm]

 Weight
 3 lbs [1.36 Kg]

Configuration

Design None Crossguide
Size WR-137
Waveguide Material and Plating Copper Alloy, Silver

Input Flange

Flange Type Round Cover Flange Designation UG-344/U Copper Alloy Plating Silver

**Output Flange** 

Flange Type Round Cover Flange Designation UG-344/U Copper Alloy Plating Silver

Coupled Flange(s)

Flange Type Round Cover Flange Designation UG-344/U Copper Alloy Plating Silver



#### **Features:**

- Crossguide Waveguide Coupler
- 40 dB Nominal Coupling Level
- 5.85 GHz to 8.2 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)

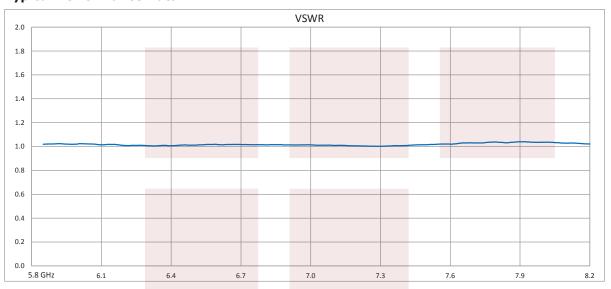
RoHS Compliant Yes
REACH Compliant 12/17/2015

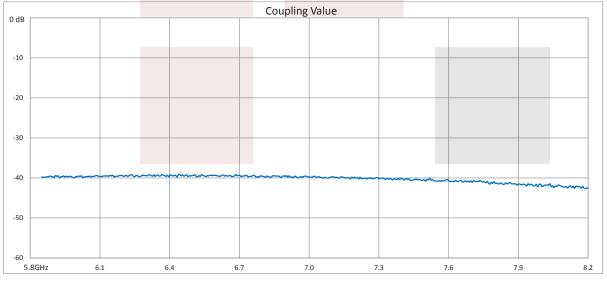
#### **Plotted and Other Data**

Notes

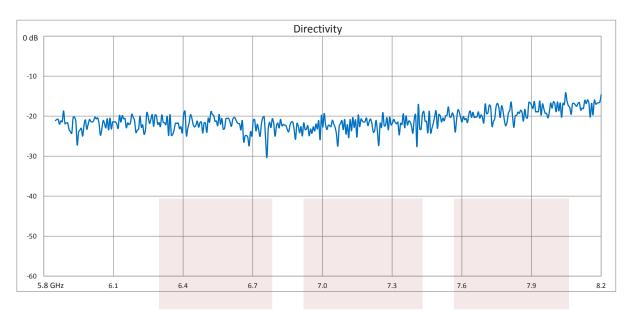
• Values at 25 °C, sea level

#### **Typical Performance Data**









40 dB WR-137 Waveguide Crossguide Coupler With UG-344/U Round Cover Flange And 5.85 GHz to 8.2 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.

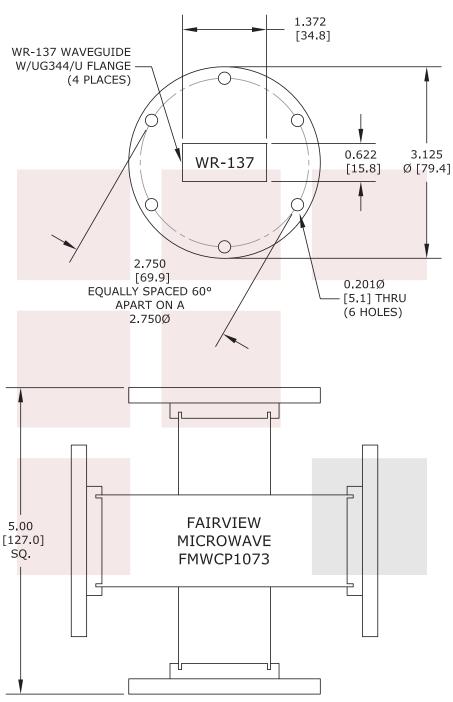
For additional information on this product, please click the following link: 40 dB WR-137 Waveguide Crossguide Coupler With UG-344/U Round Cover Flange And 5.85 GHz to 8.2 GHz FMWCP1073

URL: http://www.fairviewmicrowave.com/wr-137-40-db-waveguide-crossguide-coupler-ug344-round-none-fmwcp1073-p. aspx

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40 dB WR-137 Waveguide Crossguide Coupler With UG-344/U Round Cover Flange And 5.85 GHz to 8.2 GHz	DWG NO FMWCP1073			CAGE CODE 3FKR5			
	CAD FILE 022316	SHEET	SCALE	≣ N/A	SIZE A	2233	