

### FMWCT1107 DATA SHEET

## 50 dB WR-137 Waveguide Crossguide Coupler with CPR-137G Flange and SMA Female Coupled Port from 5.85 GHz to 8.2 GHz in Bronze

The FMWCT1107 is a 50 dB WR-137 four port crossguide coupler with one coupled port terminated (making it a three port coupler) and a coax adapter on the opposite coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling / monitoring. The coupler has a typical VSWR of 1.05:1 and are made of bronze with brass CPR-137G flanges. The FMWCT1107 is part of a family of cross guide couplers offered by Fairview with coupling values ranging from 20 to 50 dB. There is also a full family of top wall (broad wall) couplers. For the three port version of this coupler (terminated but no coax adapter) please see the FMWCT1043. For the four port version of this coupler (no termination, no coax adapter) please see the FMWCP1078.

#### **Electrical Specifications**

Description	Min	in Ty		Max	Units	
Frequency Range	5.85			8.2	GHz	
Impedance		į	50		Ohms	
Coupler						
Nominal Coupling Lev	el	į	50		dB	
Directivity		•	10		dB	
Insertion Loss		C	0.1		dB	
Main Line VSWR		1.0	05:1			
Termination						
Input Power (CW)				6	Watts	

Waveguide to Coax Ad	lapters	
VSWR	1	.25:1

#### **Mechanical Specifications**

#### **Interface**

Waveguide Size WR-137
Flange Type CPR-137G
Flange Material and Plating Brass
RF Connector Type SMA Female

Coupler Body Material and Plating Bronze
Termination Body Material and Plating Bronze

#### **Environmental Specifications**

**Compliance Certifications** (see product page for current document)

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

Notes:

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#### **Features:**

- Three Port
- Crossguide Waveguide Coupler
- Terminated
- 50 dB Nominal Coupling Level
- SMA Female Coax Adapter
- 5.85 GHz to 8.2 GHz Frequency Range
- Waveguide Body made of Bronze with Brass Flanges
- Low VSWR

#### **Applications:**

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

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013

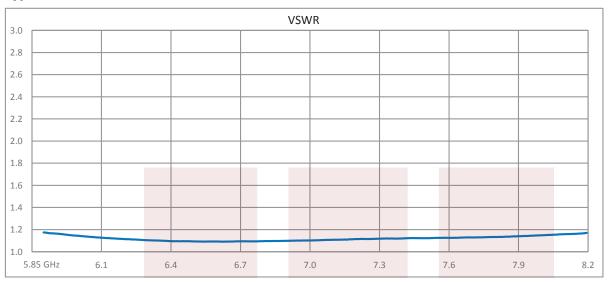
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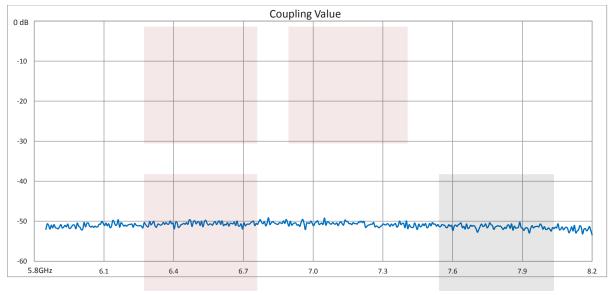
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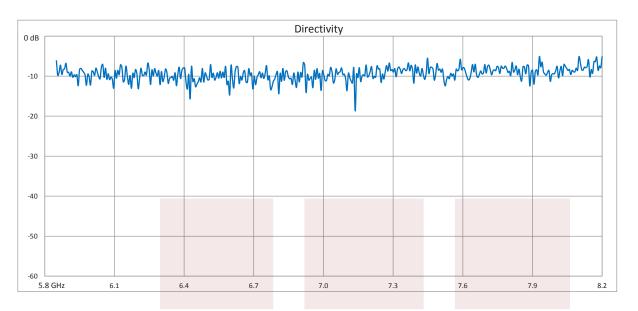


#### **Typical Performance Data**









50 dB WR-137 Waveguide Crossguide Coupler with CPR-137G Flange and SMA Female Coupled Port from 5.85 GHz to 8.2 GHz in Bronze 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.

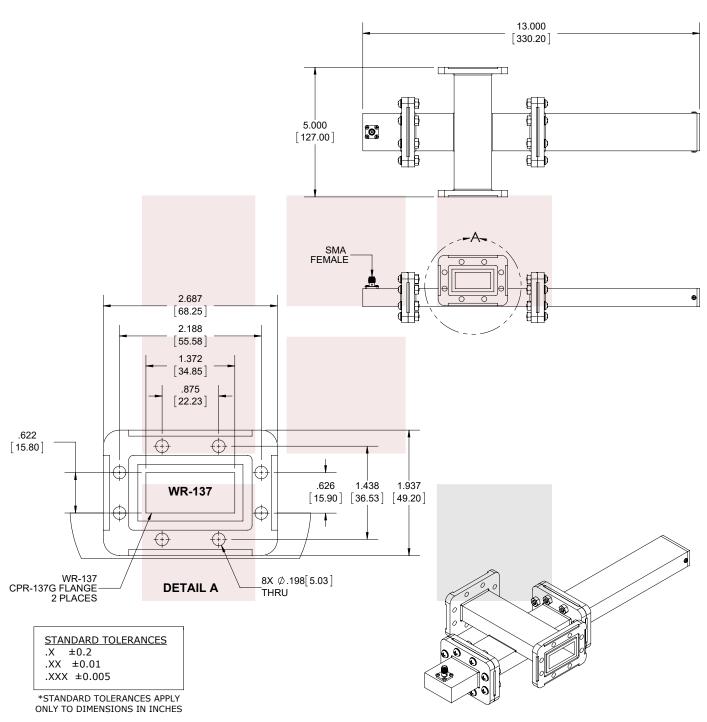
For additional information on this product, please click the following link: 50 dB WR-137 Waveguide Crossguide Coupler with CPR-137G Flange and SMA Female Coupled Port from 5.85 GHz to 8.2 GHz in Bronze FMWCT1107

URL: https://www.fairviewmicrowave.com/50db-wr137-waveguide-crossguide-coupler-cpr-137g-sma-8.2ghz-fmwct1107-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.







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50 dB WR-137 Waveguide Crossguide Coupler with CPR-137G Flange and SMA Female Coupled Port from 5.85 GHz to 8.2 GHz in Bronze	FMWCT1107			CAGE CODE 3FKR5			
	CAD FILE 062817	SHEET 1 OF 1	SCALE	≣ N/A	SIZE A	9999	