

**30 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 FMWCT1105 is a 30 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 FMWCT1105 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 FMWCT1041. For the four port version of this coupler (no termination, no coax adapter) please see the FMWCP1076.



**Electrical Specifications**

| Description                       | Min  | Typ    | Max | Units |
|-----------------------------------|------|--------|-----|-------|
| Frequency Range                   | 5.85 |        | 8.2 | GHz   |
| Impedance                         |      | 50     |     | Ohms  |
| <b>Coupler</b>                    |      |        |     |       |
| Nominal Coupling Level            |      | 30     |     | dB    |
| Directivity                       |      | 20     |     | dB    |
| Insertion Loss                    |      | 0.1    |     | dB    |
| Main Line VSWR                    |      | 1.05:1 |     |       |
| <b>Termination</b>                |      |        |     |       |
| Input Power (CW)                  |      |        | 6   | Watts |
| <b>Waveguide to Coax Adapters</b> |      |        |     |       |
| VSWR                              |      | 1.25:1 |     |       |

**Mechanical Specifications**

|                                       |            |
|---------------------------------------|------------|
| <b>Interface</b>                      |            |
| Waveguide Size                        | WR-137     |
| Flange Type                           | CPR-137G   |
| Flange Material and Plating           | Brass      |
| RF Connector Type                     | SMA Female |
| Coupler Body Material and Plating     |            |
| Termination Body Material and Plating |            |
|                                       | Bronze     |
|                                       | Bronze     |

**Environmental Specifications**

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Features:**

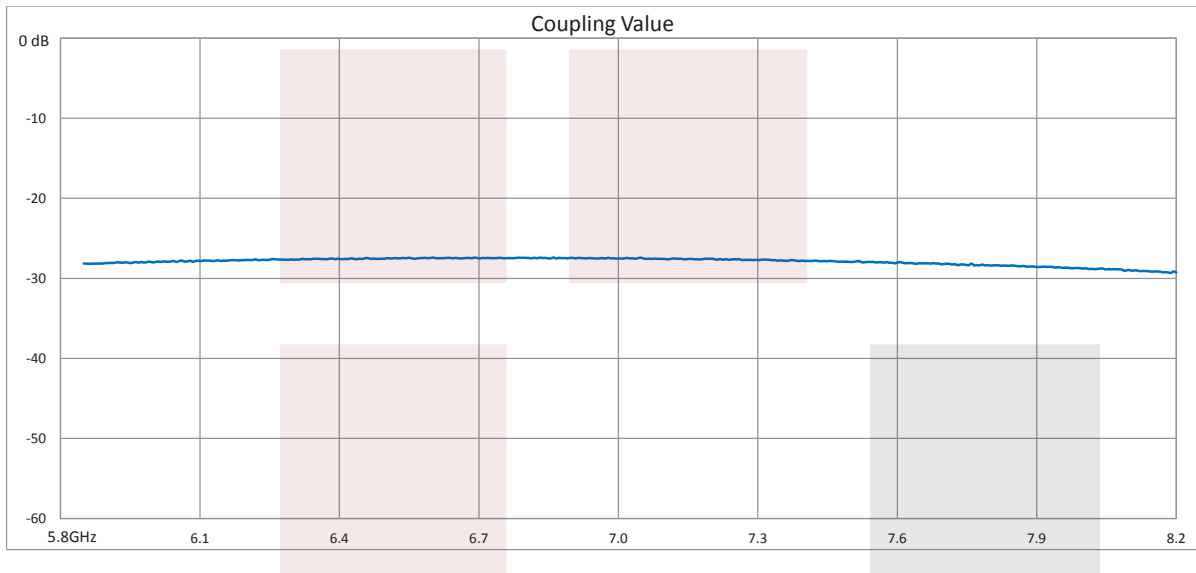
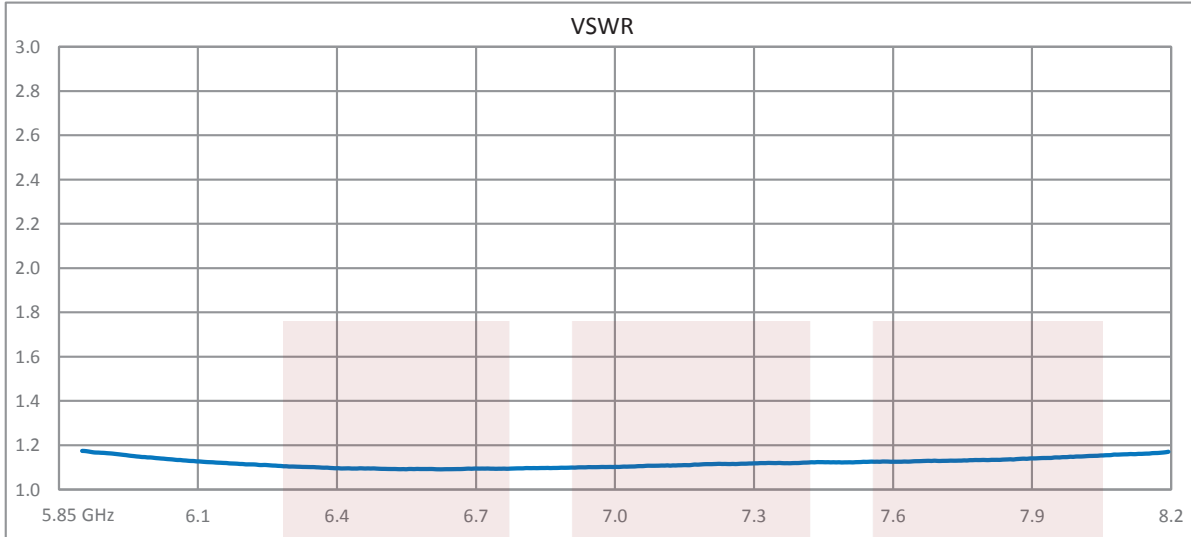
- Three Port
- Crossguide Waveguide Coupler
- Terminated
- 30 dB Nominal Coupling Level
- SMA Female Coax Adapter
- 5.85 GHz to 8.2 GHz Frequency Range
- Waveguide Body made of Bronze with Brass Flanges
- Low VSWR

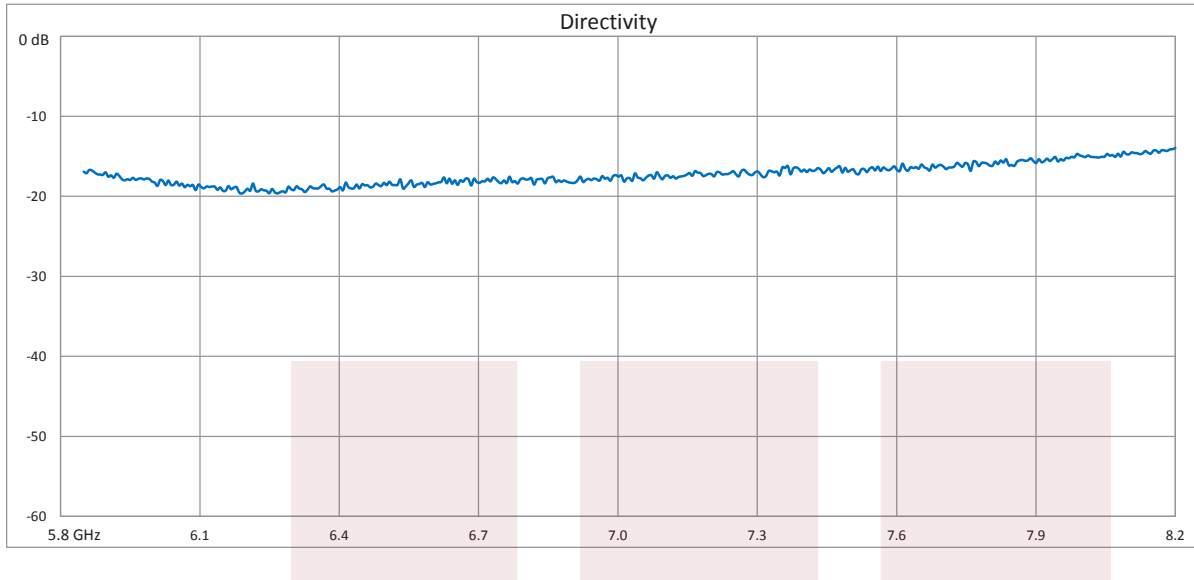
**Applications:**

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

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**Typical Performance Data**



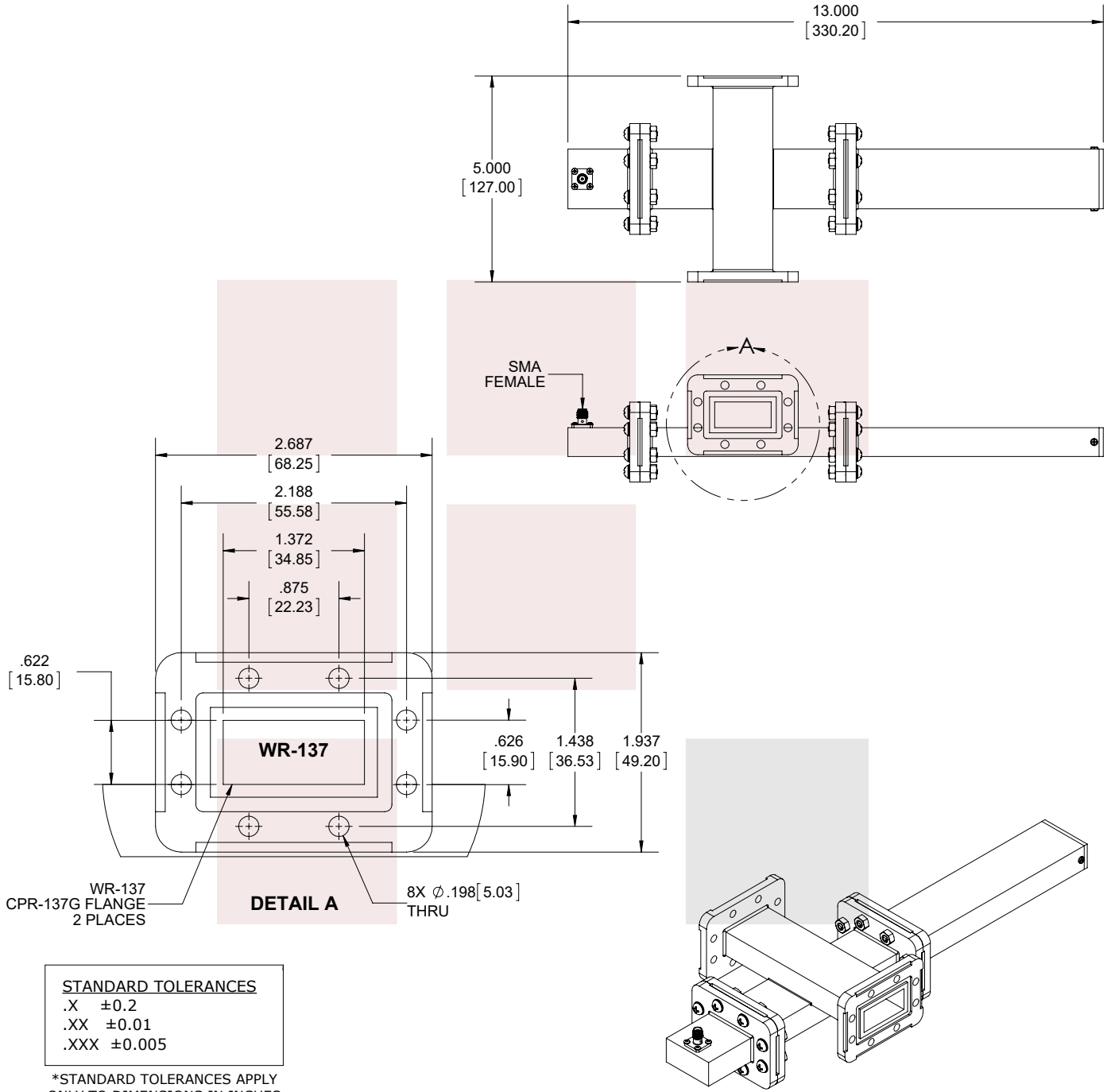


30 dB WR-137 Waveguide Crossguide Coupler with CPR-137G Flange and SMA Female Coupled Port from 5.85 GHz to 8.2 GHz in Bronze from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [30 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 FMWCT1105](https://www.fairviewmicrowave.com/30db-wr137-waveguide-crossguide-coupler-cpr-137g-sma-8.2ghz-fmwct1105-p.aspx)

URL: <https://www.fairviewmicrowave.com/30db-wr137-waveguide-crossguide-coupler-cpr-137g-sma-8.2ghz-fmwct1105-p.aspx>

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|  |        |   |        |                           |      |
|--|--------|---|--------|---------------------------|------|
| <b>FAIRVIEW MICROWAVE INC.</b><br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM  |        | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |        |                           |      |
| TITLE<br>30 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 |        | DWG NO<br><b>FMWCT1105</b>  |        | CAGE CODE<br><b>3FKR5</b> |      |
| CAD FILE   | 062817 | SHEET   | 1 OF 1 | SCALE                     | N/A  |
|  |        | SIZE  | A      |                           | 9999 |