

## 50 dB WR-112 Waveguide Crossguide Coupler with CPR-112G Flange and SMA Female Coupled Port from 7.05 GHz to 10 GHz in Bronze

The FMWCT1091 is a 50 dB WR-112 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-112G flanges. The FMWCT1091 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 FMWCT1035. For the four port version of this coupler (no termination, no coax adapter) please see the FMWCP1070.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
Impedance		50		Ohms
<b>Coupler</b>				
Nominal Coupling Level		50		dB
Directivity		10		dB
Insertion Loss		0.1		dB
Main Line VSWR		1.05:1		
<b>Termination</b>				
Input Power (CW)			5	Watts
<b>Waveguide to Coax Adapters</b>				
VSWR		1.25:1		

### Mechanical Specifications

#### Interface

Waveguide Size	WR-112
Flange Type	CPR-112G
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:



### Features:

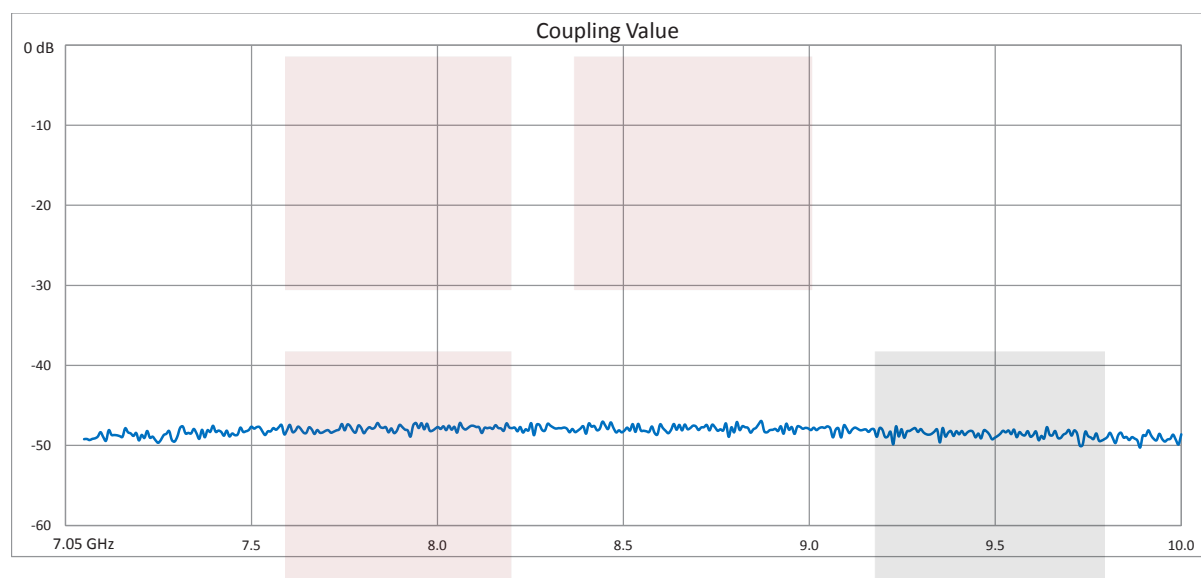
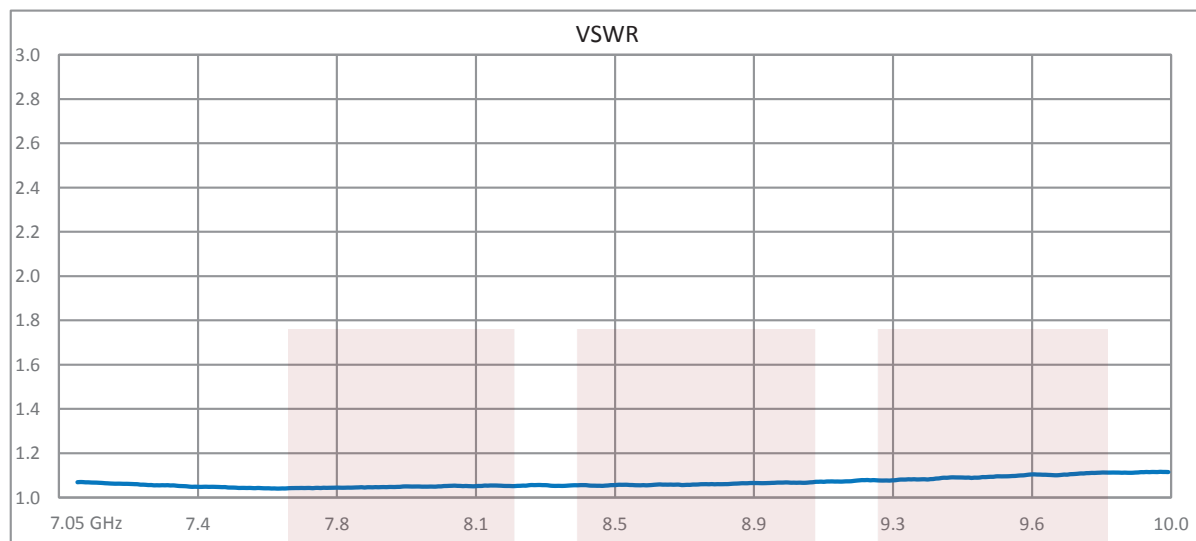
- Three Port
- Crossguide Waveguide Coupler
- Terminated
- 50 dB Nominal Coupling Level
- SMA Female Coax Adapter
- 7.05 GHz to 10 GHz Frequency Range
- Waveguide Body made of Bronze with Brass Flanges
- Low VSWR

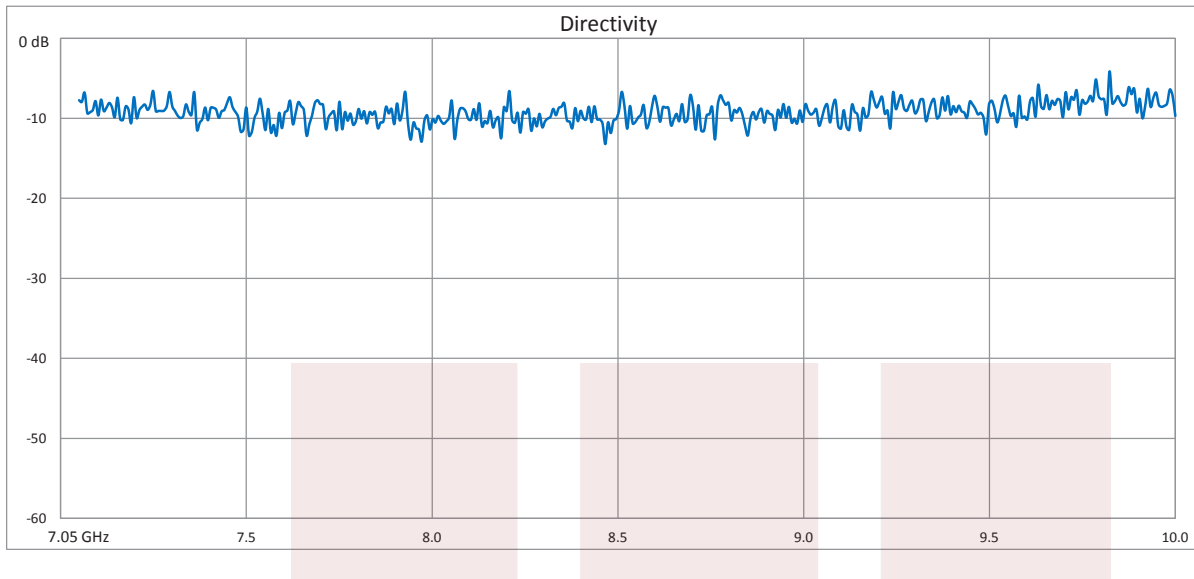
### Applications:

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

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**Typical Performance Data**



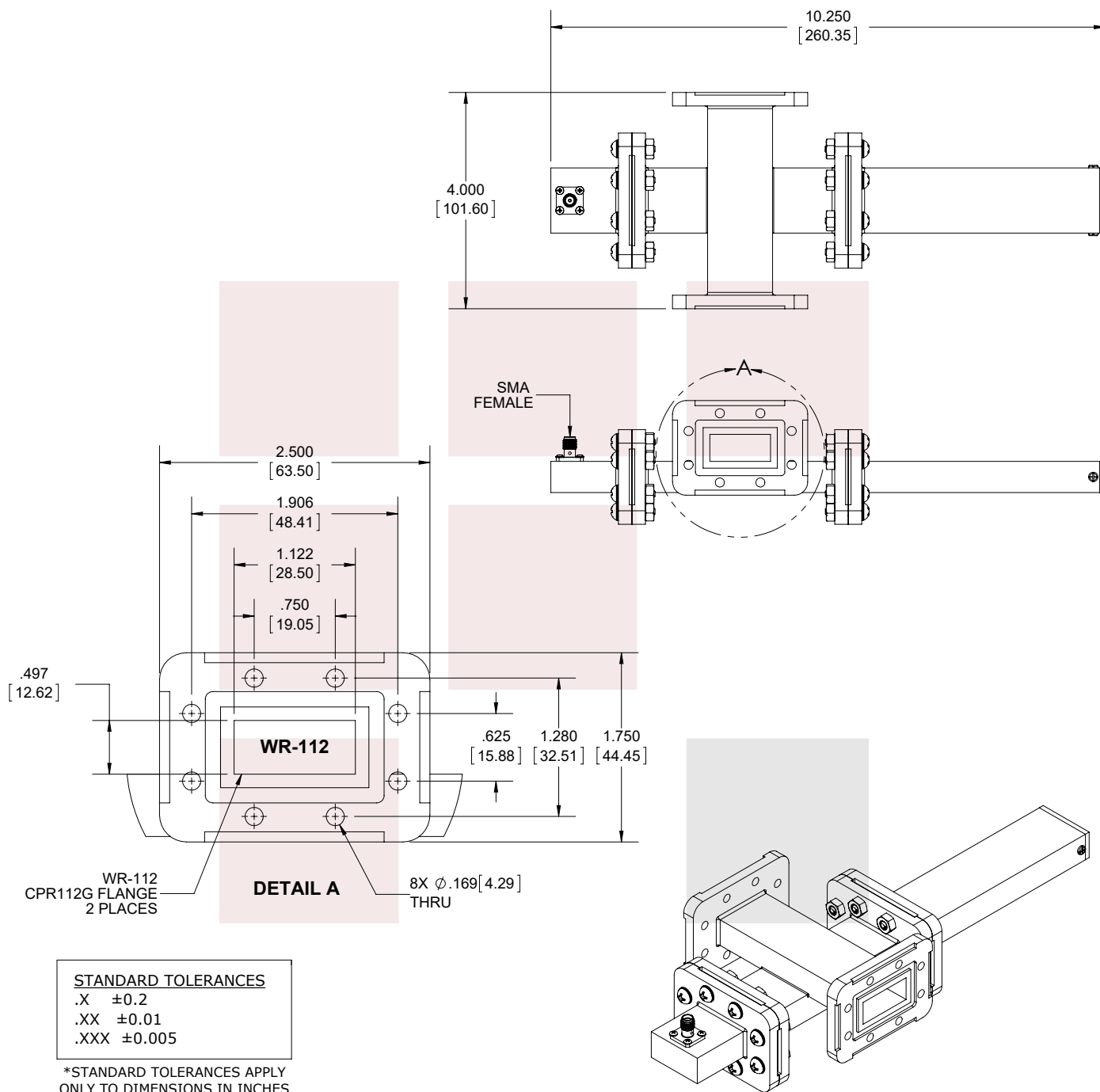


50 dB WR-112 Waveguide Crossguide Coupler with CPR-112G Flange and SMA Female Coupled Port from 7.05 GHz to 10 GHz in Bronze from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 dB WR-112 Waveguide Crossguide Coupler with CPR-112G Flange and SMA Female Coupled Port from 7.05 GHz to 10 GHz in Bronze FMWCT1091](https://www.fairviewmicrowave.com/50db-wr112-waveguide-crossguide-coupler-cpr-112g-sma-10ghz-fmwct1091-p.aspx)

URL: <https://www.fairviewmicrowave.com/50db-wr112-waveguide-crossguide-coupler-cpr-112g-sma-10ghz-fmwct1091-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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### NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

### TITLE

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CPR-112G Flange and SMA Female Coupled Port from  
7.05 GHz to 10 GHz in Bronze

### DWG NO

FMWCT1091

### CAGE CODE

3FKR5

### CAD FILE

062817

### SHEET

1 OF 1

### SCALE

N/A

### SIZE

A 9999