

30 dB WR-22 Waveguide Broadwall Coupler with UG Cover Flange and 2.4mm Female Coupled Port from 33 GHz to 50 GHz in Copper

The FMW22CP005-30 is a WR-22 Directional Broadwall waveguide coupler with 2.4mm female coupled port that operates in the frequency range of 33 to 50 GHz. This Waveguide component has a maximum VSWR of 1.5:1. These designs are made of copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 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. Fairview Microwave offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	33		50	GHz
Coupler				
Nominal Coupling Level		30		dB
Directivity	30			dB
Insertion Loss			0.4	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.5:1	
Coupling Flatness			±1	dB
Input Power (CW)			70	Watts
Input Power Peak			10	kWatts

Mechanical Specifications

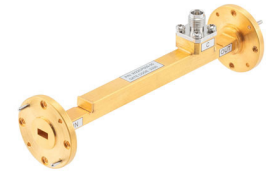
Size	
Length	4.33 in [109.98 mm]
Width	1.13 in [28.7 mm]
Height	1.13 in [28.7 mm]
Weight	0.17 lbs [77.11 g]
Flange Type	UG Cover
Flange Material and Plating	Copper, Gold
RF Connector Type	2.4mm Female
Coupler Body Material and Plating	Copper, Gold

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

- Three Port Broadwall Waveguide Coupler
- 30±1 dB Nominal Coupling Level
- Integrated 2.4mm Female Connector coupled port
- 33 GHz to 50 GHz Frequency Range
- Main Line VSWR < 1.1:1
- Max Power 70W (CW)

Applications:

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

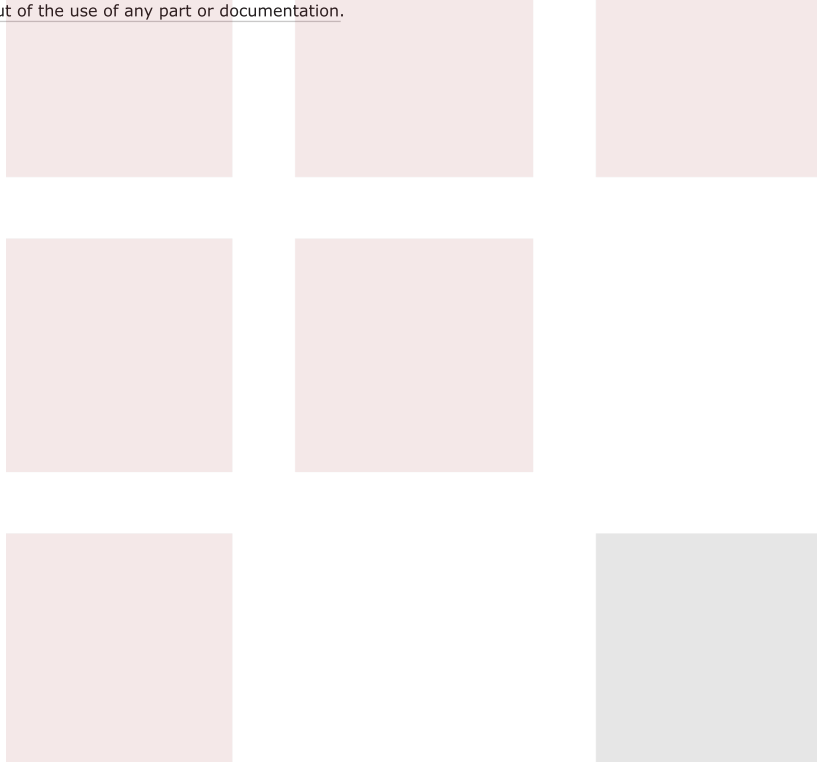
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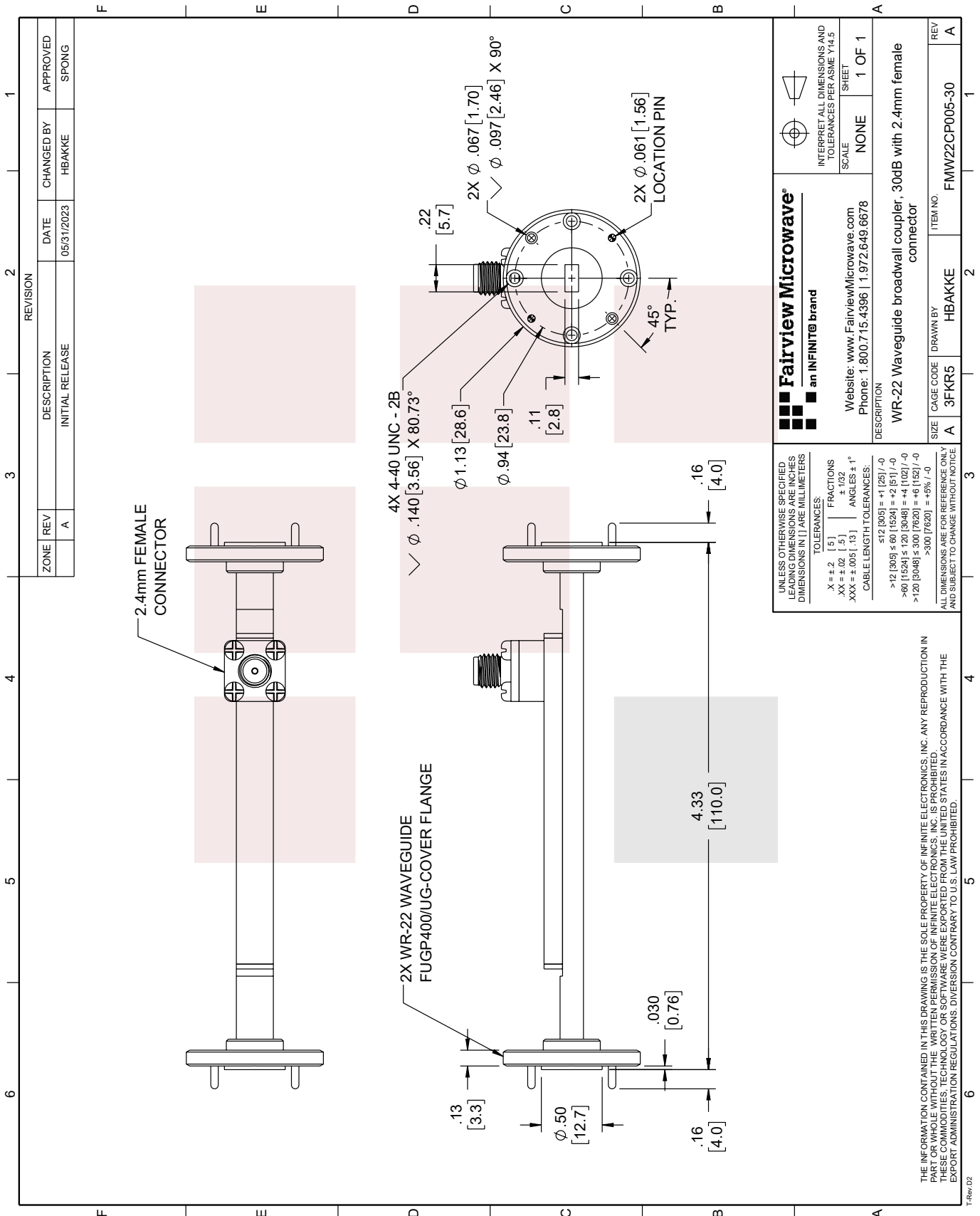
30 dB WR-22 Waveguide Broadwall Coupler with UG Cover Flange and 2.4mm Female Coupled Port from 33 GHz to 50 GHz in Copper from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [30 dB WR-22 Waveguide Broadwall Coupler with UG Cover Flange and 2.4mm Female Coupled Port from 33 GHz to 50 GHz in Copper FMW22CP005-30](#)

URL: <https://www.fairviewmicrowave.com/30db-wr22-waveguide-broadwall-coupler-ug-50mhz-fmw22cp005-30-p.aspx>

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ZONE		REVISION		DATE		APPROVED	
1	A	INITIAL RELEASE		05/31/2023	HBAKKE	SPONG	

<p>Fairview Microwave an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>	
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>.X ± .2 [5] FRACTIONS ± .132</p> <p>.XX ± .02 [.5] ANGLES ± 1°</p> <p>.XXX ± .005 [.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>≤ 12 [305] = +1 [25] / -0</p> <p>> 12 [305] ≤ 60 [1524] = +2 [51] / -0</p> <p>> 60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>> 120 [3048] ≤ 300 [7620] = +6 [152] / -0</p> <p>> 300 [7620] = +5% / -0</p>		<p>DESCRIPTION: WR-22 Waveguide broadband coupler, 30dB with 2.4mm female connector</p> <p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: HBAKKE</p> <p>ITEM NO.: FMW22CP005-30</p>	

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