

20 dB WR-28 Waveguide Broadwall Coupler with UG Grooved Flange and 2.92mm Female Coupled Port from 26.5 GHz to 40 GHz in Copper

The FMW28CP005-20 is a WR-28 Directional Broadwall waveguide coupler with 2.92mm female coupled port that operates in the frequency range of 26.5 to 40 GHz. This Waveguide component has a maximum VSWR of 1.5:1. These designs are made of painted 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	26.5		40	GHz
Coupler				
Nominal Coupling Level		20		dB
Directivity	30			dB
Insertion Loss			0.35	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.5:1	
Coupling Flatness			±0.7	dB
Input Power (CW)			100	Watts
Input Power Peak			10	kWatts

Mechanical Specifications

Size	
Length	6.57 in [166.88 mm]
Width	0.75 in [19.05 mm]
Height	0.75 in [19.05 mm]
Weight	0.61 lbs [276.69 g]
Flange Type	UG Grooved
Flange Material and Plating	Copper, Gold
RF Connector Type	2.92mm 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
- 20±0.7 dB Nominal Coupling Level
- Integrated 2.92mm Female Connector coupled port
- 26.5 GHz to 40 GHz Frequency Range
- Main Line VSWR < 1.1:1
- Max Power 100W (CW)

Applications:

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

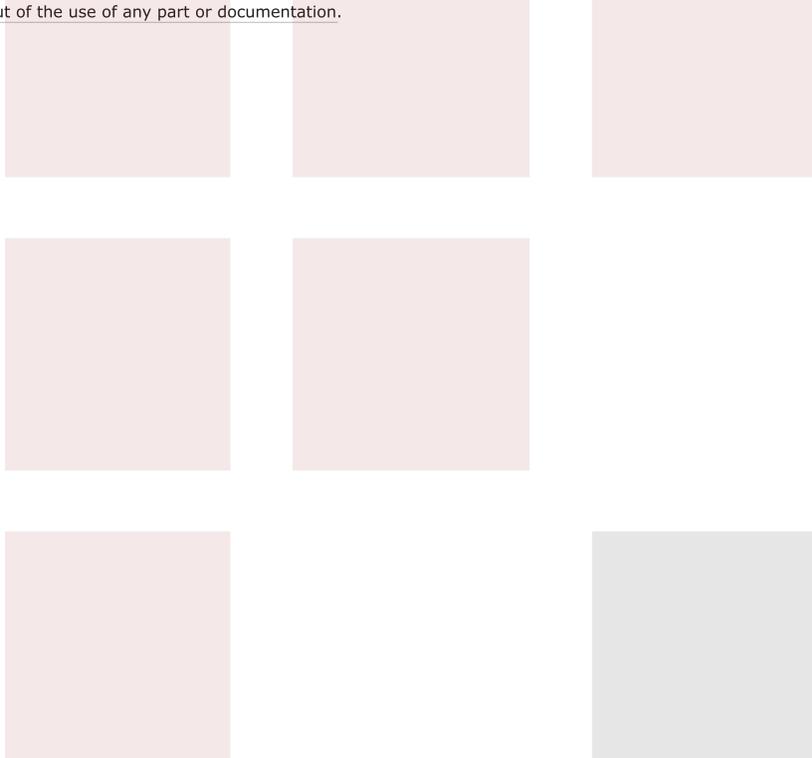
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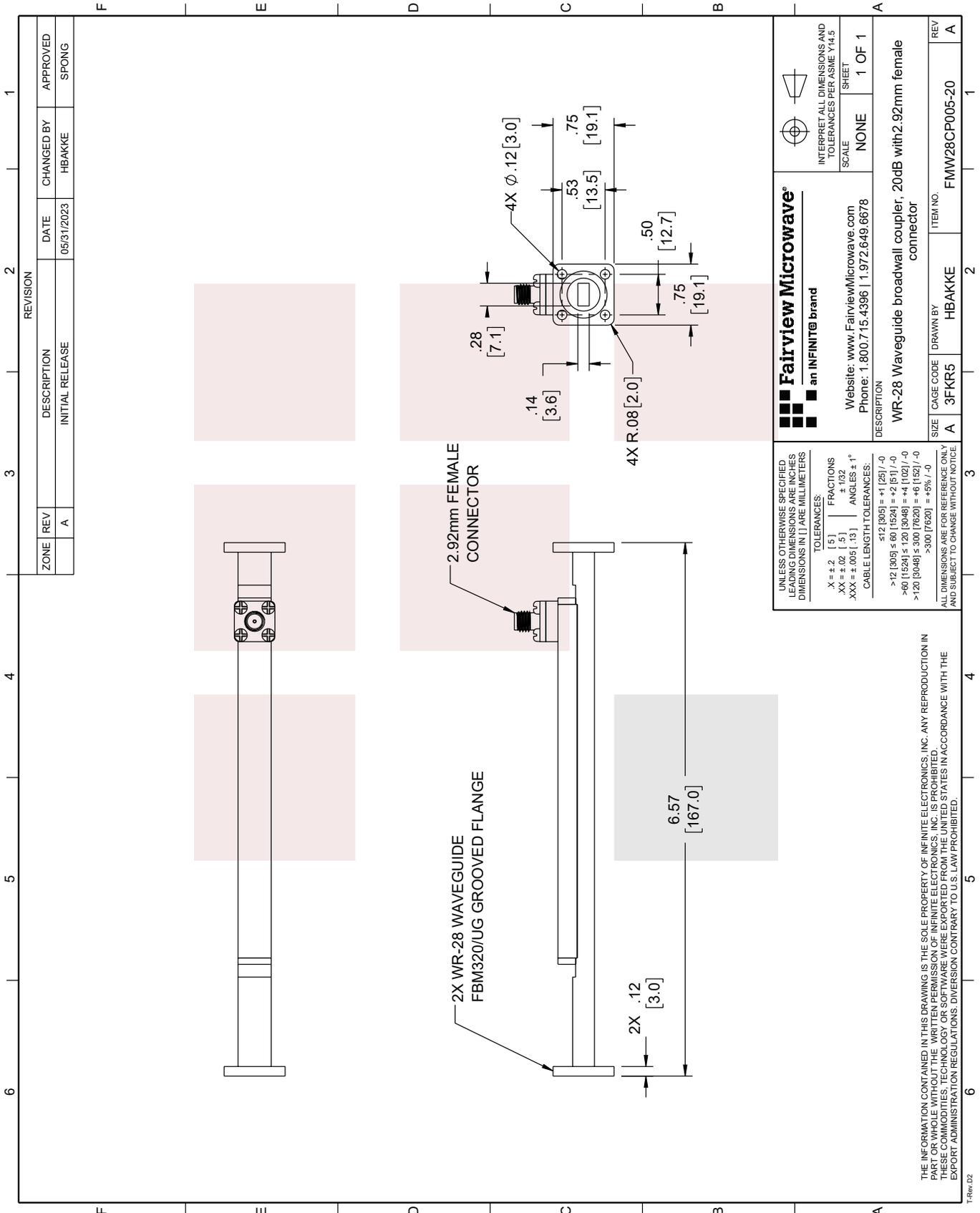
20 dB WR-28 Waveguide Broadwall Coupler with UG Grooved Flange and 2.92mm Female Coupled Port from 26.5 GHz to 40 GHz in Copper from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 dB WR-28 Waveguide Broadwall Coupler with UG Grooved Flange and 2.92mm Female Coupled Port from 26.5 GHz to 40 GHz in Copper FMW28CP005-20](#)

URL: <https://www.fairviewmicrowave.com/20db-wr28-waveguide-broadwall-coupler-ug-40mhz-fmw28cp005-20-p.aspx>

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

Fairview Microwave
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DESCRIPTION: WR-28 Waveguide broadband coupler, 20dB with 2.92mm female connector

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X ± .2 [5] | FRACTIONS ± 1/32 | ANGLES ± 1°
 .XX ± .02 [.5] | .XXX ± .005 [.13]

CABLE LENGTH TOLERANCES:
 ≤12 [305] = ±1 [25] / -0
 >12 [305] ≤ 60 [1524] = +2 [51] / -0
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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SCALE	NONE	SHEET	1 OF 1
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5			

SIZE	A	CAGE CODE	3FKR5	DRAWN BY	HBAKKE	ITEM NO.	FMW28CP005-20	REV	A
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