

50 dB WR-112 Waveguide Crossguide Coupler with UG Choke Flange and UG Cover Flange Coupled Port from 6.57 GHz to 9.99 GHz in Aluminum

The FMWCP1083-50 is a 50 dB WR-112 three port crossguide coupler with integrated UG Cover Flange for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via waveguide to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Aluminum with UG Choke flanges. The FMWCP1083-50 is part of a family of cross guide couplers offered by Fairview Microwave with coupling values ranging from 20 to 50 dB.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	6.57		9.99	GHz
Coupler				
Nominal Coupling Level		50		dB
Coupling Accuracy			±1.5	dB
Directivity	18			dB
Insertion Loss		0.1		dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Input Power (CW)			800	Watts
Input Power Peak			300	kWatts

Mechanical Specifications

Size	
Length	4.724 in [119.99 mm]
Width	3.228 in [81.99 mm]
Height	1.882 in [47.8 mm]
Weight	0.661 lbs [299.82 g]
Interface	
Waveguide Size	WR-112
Flange Type	UG Cover
Coupler Body Material and Plating	Aluminum, Chromate

Environmental Specifications

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

Plotted and Other Data

Notes:

Features:

- Three Port Crossguide Waveguide Coupler
- 50±1.5 dB Nominal Coupling Level
- 6.57 GHz to 9.99 GHz Frequency Range
- Low VSWR < 1.25:1

Applications:

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

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50 dB WR-112 Waveguide Crossguide Coupler with UG Choke Flange and UG Cover Flange Coupled Port from 6.57 GHz to 9.99 GHz in Aluminum 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.

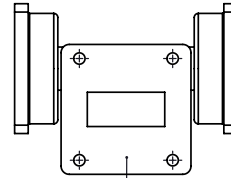
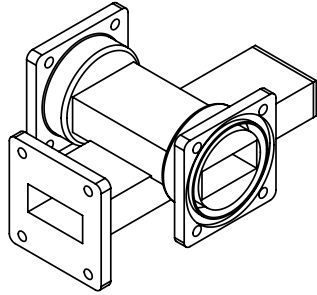
For additional information on this product, please click the following link: [50 dB WR-112 Waveguide Crossguide Coupler with UG Choke Flange and UG Cover Flange Coupled Port from 6.57 GHz to 9.99 GHz in Aluminum FMWCP1083-50](#)

URL: <https://www.fairviewmicrowave.com/50-db-wr-112-waveguide-crossguide-coupler-fmwcp1083-50-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.

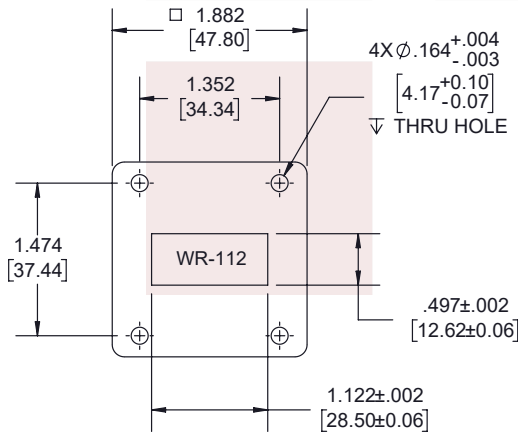
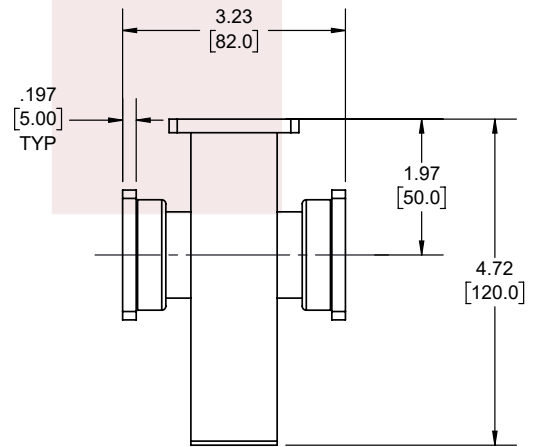
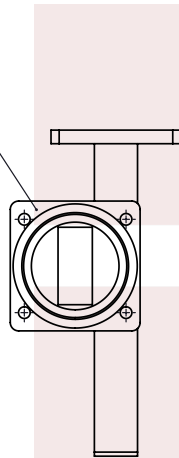


REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/7/2022	S. PONG

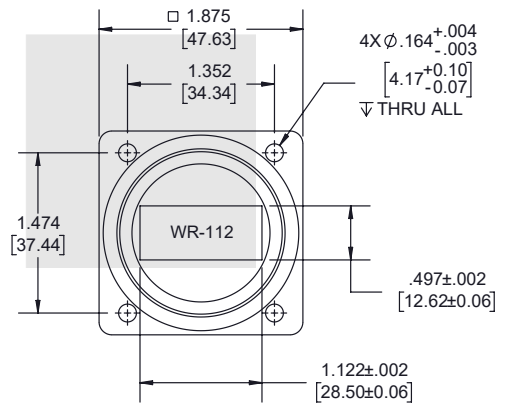


WR-112
FBP84/UG COVER

2X
WR112
FBE84/UG CHOKE



FLANGE DETAIL
(FBP84/UG COVER)



FLANGE DETAIL
(FBE84/UG CHOKE)

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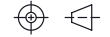
TITLE
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08] FRACTIONS L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51] ± 1/32 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13] ANGLES ± 1° 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMWCP1083-50	REV A
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T-Rev.D