

WR-62 Waveguide Isolator with 20 dB min Isolation from 11.9 GHz to 18 GHz using Cover Flange in Aluminum

The FM-W62IR001 is a Waveguide Isolator offering 20 dB minimum isolation over the Ku band frequency range of 11.9 to 18 GHz. The design achieves high isolation with wide band performance and the WR-62 waveguide uses UG Square Cover compatible flanges on all ports and has a power rating of 50 watts (CW).

Fairview Microwave offers a wide variety of isolators and waveguide isolators to fit your needs. These are two-port devices that transmit microwave or radio frequency power in one direction only and block the signal in the opposite direction. They can be thought of as a diode for RF energy. Isolators are used to isolate equipment from the effects of conditions outside of the equipment. For instance they are used to prevent a microwave source being detuned by a mismatched load. Fairview Microwave's waveguide isolators feature excellent insertion loss, full WR band high isolation and reliability.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	11.9		18	GHz
Insertion Loss			0.3	dB
Isolation	20			dB
VSWR			1.25:1	
Forward Power (CW)			50	Watts
Forward Power (Peak)			2	kWatts
Reverse Power (CW)			5	Watts
Reverse Power (Peak)			200	Watts

Mechanical Specifications

Size	
Length	3.94 in [100.08 mm]
Width	1.77 in [44.96 mm]
Height	1.31 in [33.27 mm]
Weight	0.18 lbs [81.65 g]

Configuration	
Waveguide Size	WR-62
Flange Type	Cover
Body Material and Plating	Aluminum, Chromate

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

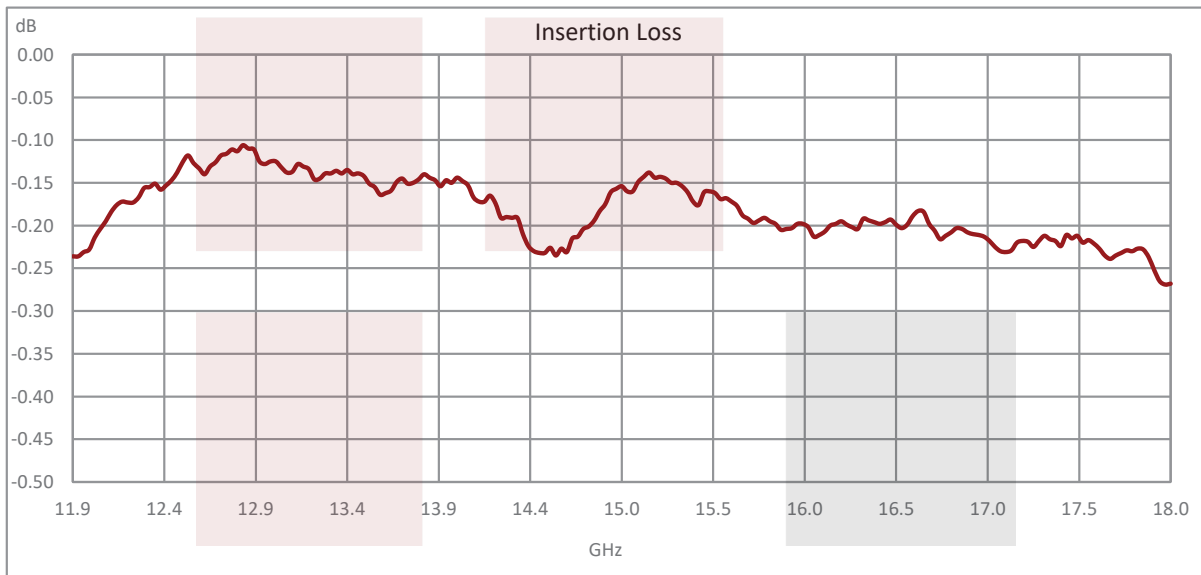
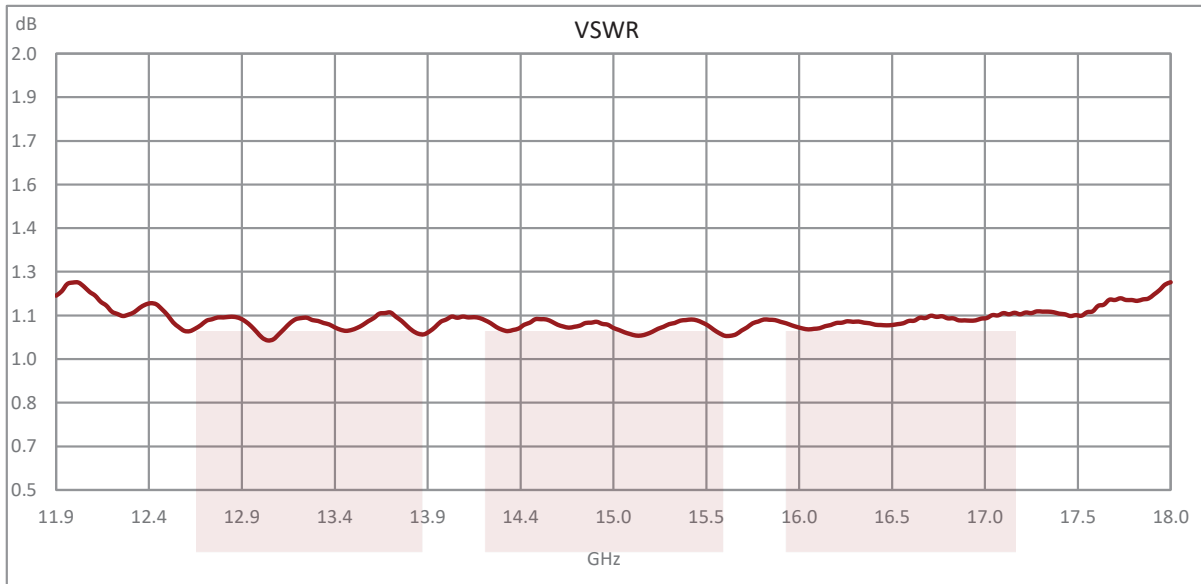
- WR-62 Waveguide Isolator
- Ku Band Frequency Range 11.9 to 18 GHz
- UG Cover Flange Configuration
- Maximum VSWR 1.25:1
- Minimum 20 dB isolation
- Maximum Forward Power 50 W (CW)

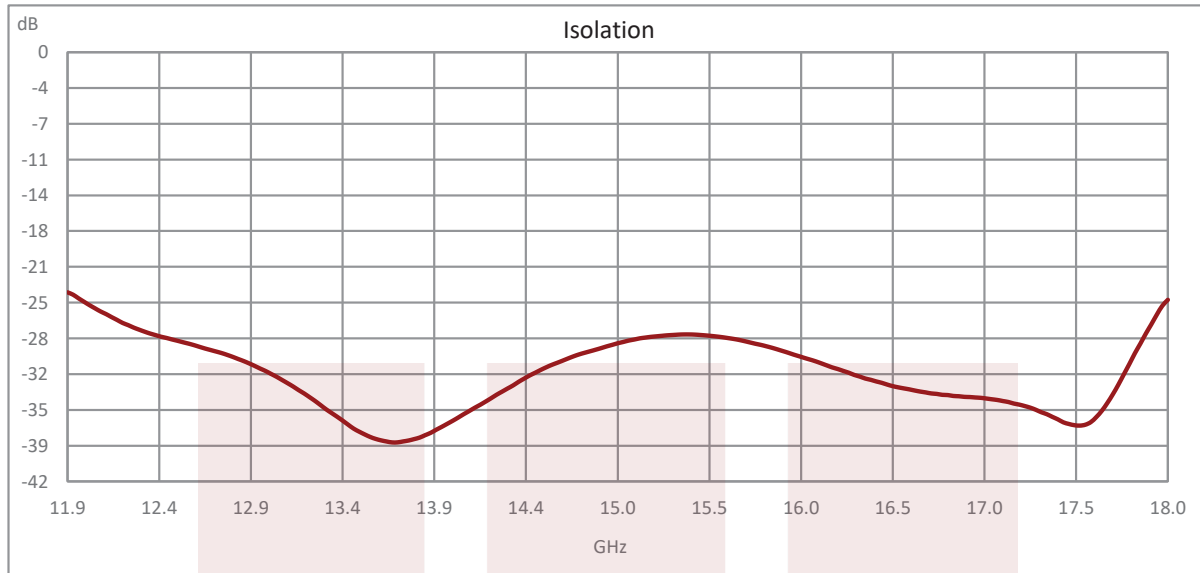
Applications:

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

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Typical Performance Data



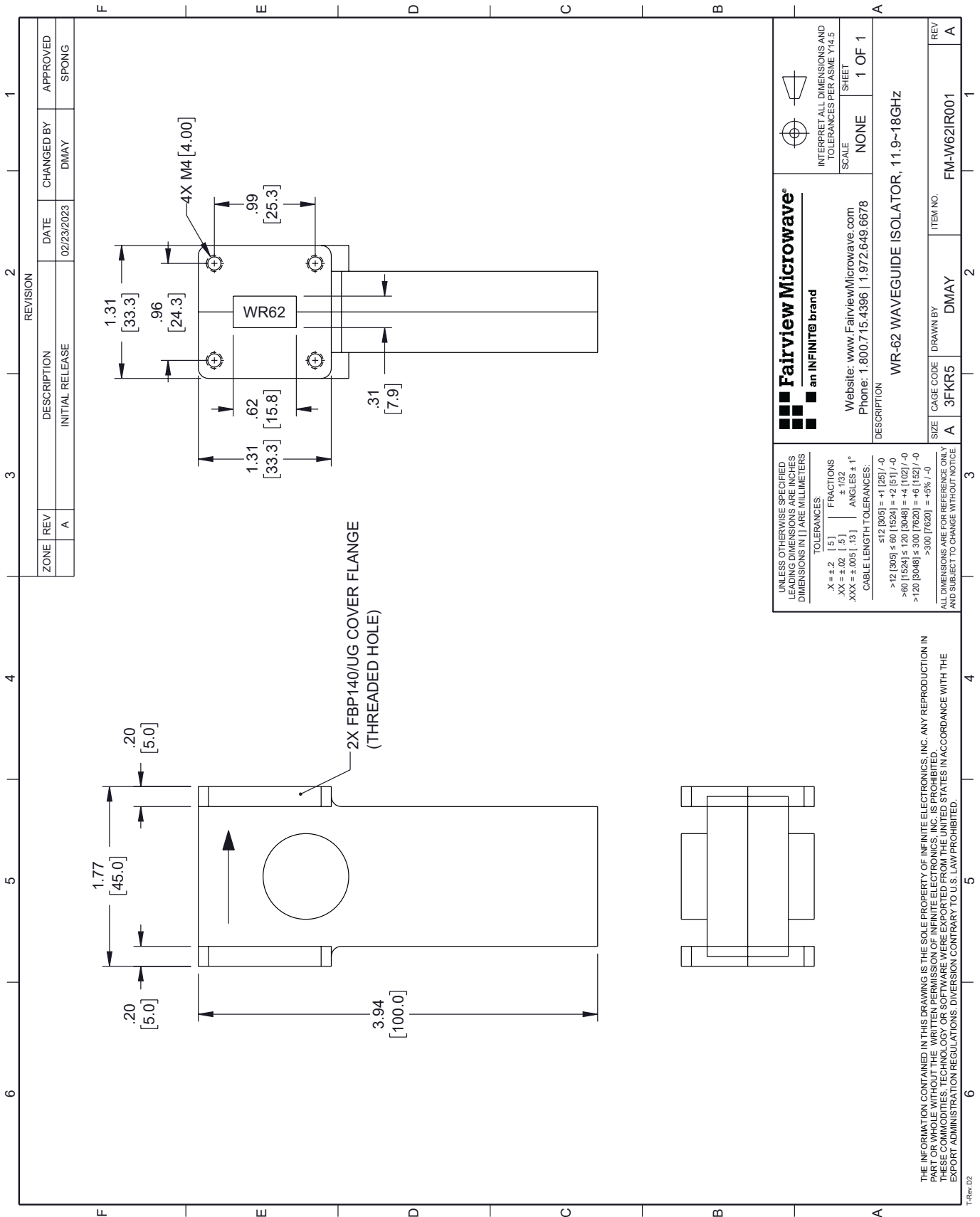


WR-62 Waveguide Isolator with 20 dB min Isolation from 11.9 GHz to 18 GHz using Cover Flange in Aluminum from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-62 Waveguide Isolator with 20 dB min Isolation from 11.9 GHz to 18 GHz using Cover Flange in Aluminum FM-W62IR001](#)

URL: <https://www.fairviewmicrowave.com/wr62-waveguide-isolator-20db-18ghz-fm-w62ir001-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.



ZONE		REVISION		DESCRIPTION		DATE		CHANGED BY		APPROVED	
A				INITIAL RELEASE		02/23/2023		DMAY		SPONG	

Fairview Microwave
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Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

DESCRIPTION: WR-62 WAVEGUIDE ISOLATOR, 11.9-18GHZ

SCALE: NONE
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FM-W62IR001

REV A

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

TOLERANCES:

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

CABLE LENGTH TOLERANCES:

≤ 12 [305]	± .125 / -0
> 12 [305] ≤ 60 [1524]	± .25 / -0
> 60 [1524] ≤ 120 [3048]	± .5 / -0
> 120 [3048] ≤ 300 [7620]	± 1.0 / -0
> 300 [7620]	± 2.0 / -0

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

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