

WR-28 Waveguide Isolator with 16 dB min Isolation from 26.5 GHz to 40 GHz using Cover Flange in Brass

The FM-W28IR001 is a Waveguide Isolator offering 16 dB minimum isolation over the Ka band frequency range of 26.5 to 40 GHz. The design achieves high isolation with wide band performance and the WR-28 waveguide uses UG Square Cover compatible flanges on all ports and has a power rating of 15 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	26.5		40	GHz
Insertion Loss			0.4	dB
Isolation	16			dB
VSWR			1.4:1	
Forward Power (CW)			15	Watts
Forward Power (Peak)			300	Watts
Reverse Power (CW)			1.5	Watts
Reverse Power (Peak)			30	Watts

Mechanical Specifications

Size

Length	1.5 in [38.1 mm]
Width	0.67 in [17.02 mm]
Height	0.95 in [24.13 mm]
Weight	0.2 lbs [90.72 g]

Configuration

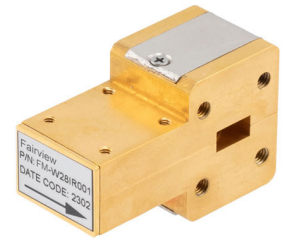
Waveguide Size	WR-28
Flange Type	Cover
Body Material and Plating	Brass, Gold

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

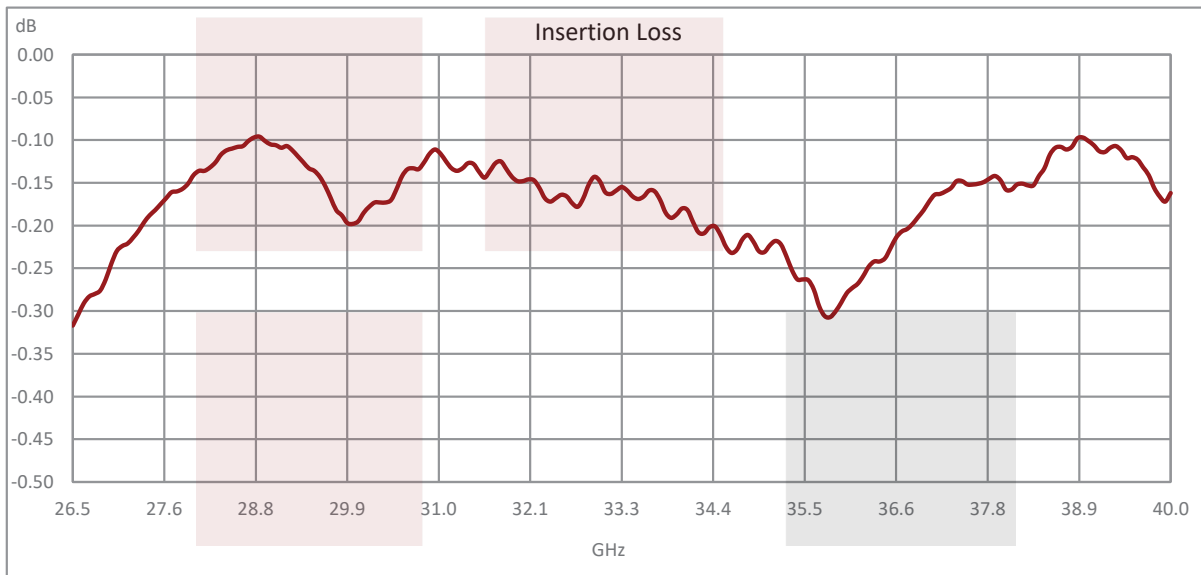
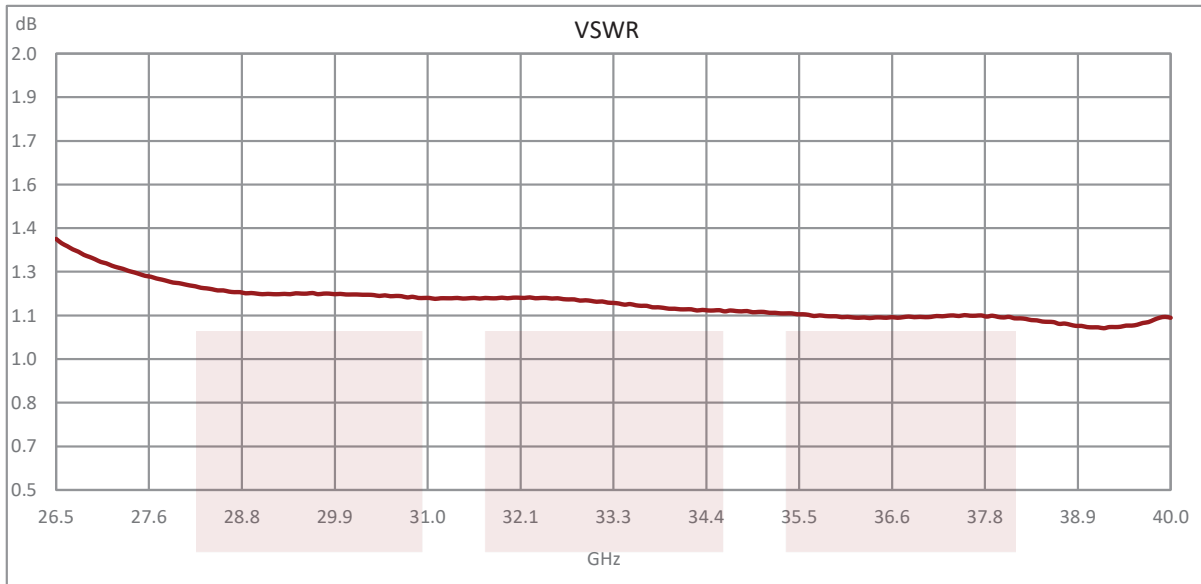
- WR-28 Waveguide Isolator
- Ka Band Frequency Range 26.5 to 40 GHz
- UG Cover Flange Configuration
- Maximum VSWR 1.4:1
- Minimum 16 dB isolation
- Maximum Forward Power 15 W (CW)

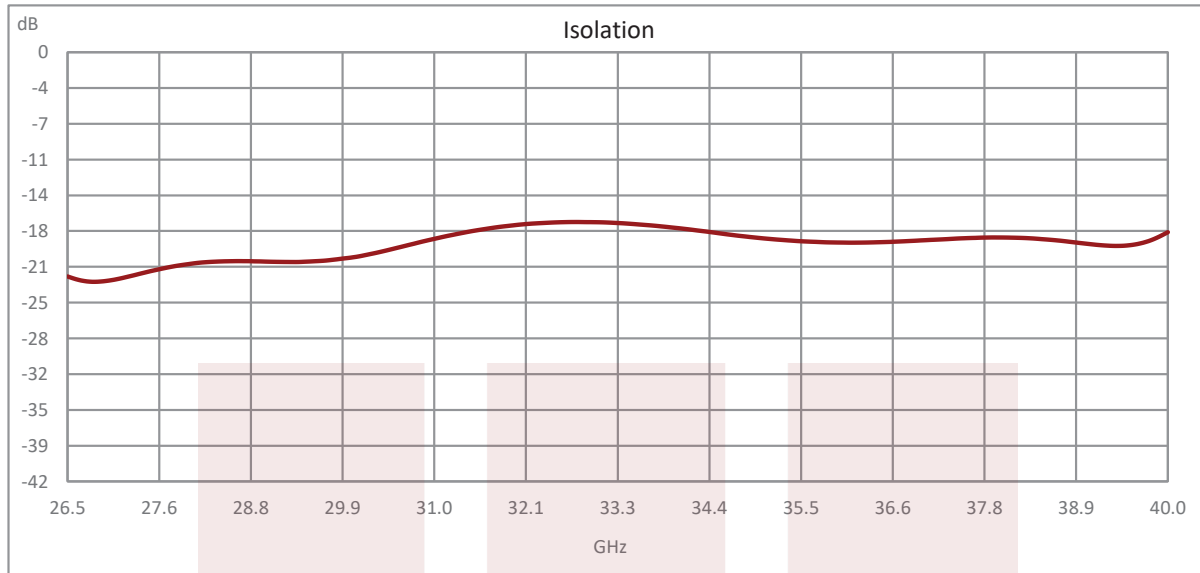
Applications:

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

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



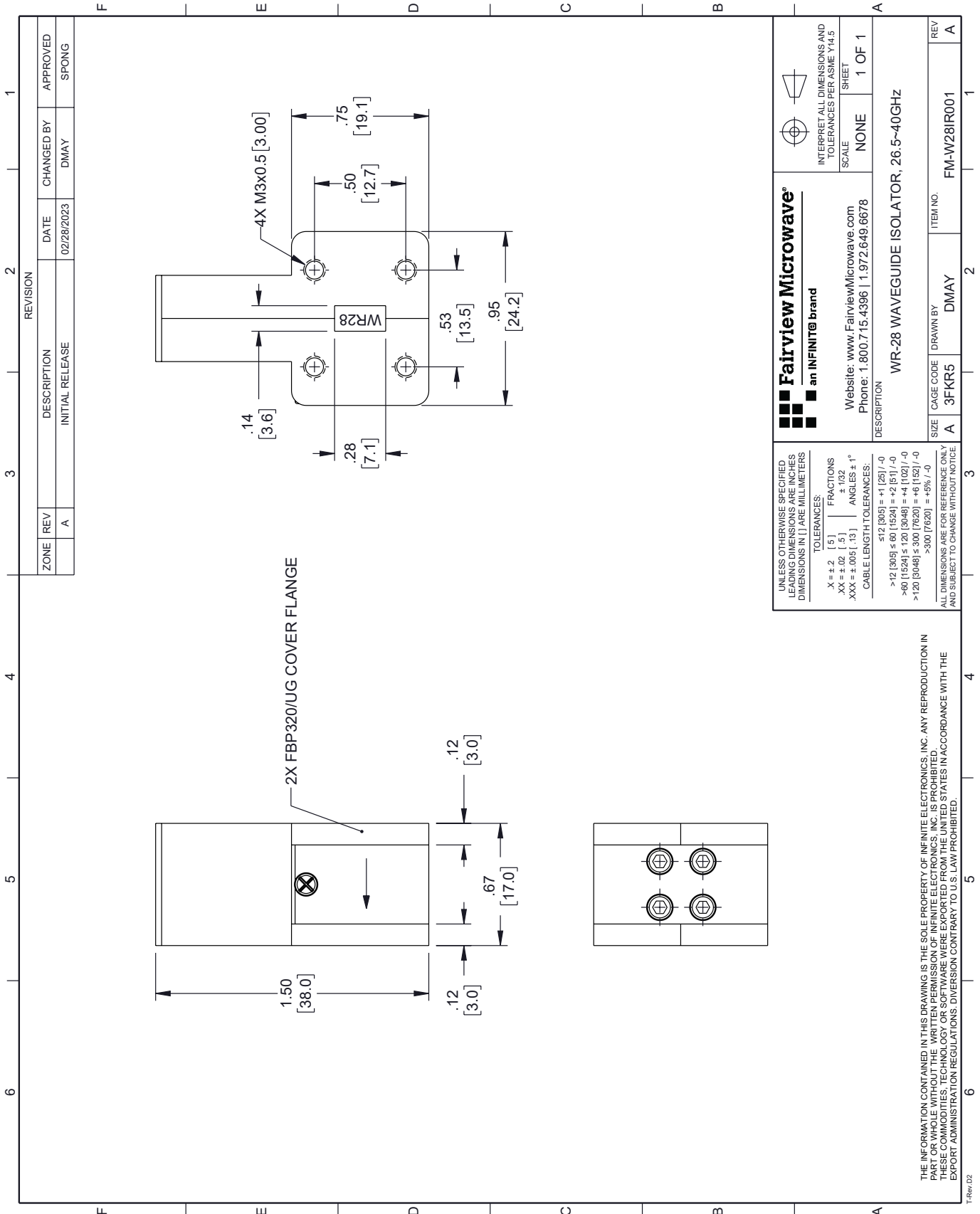


WR-28 Waveguide Isolator with 16 dB min Isolation from 26.5 GHz to 40 GHz using Cover Flange in Brass from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-28 Waveguide Isolator with 16 dB min Isolation from 26.5 GHz to 40 GHz using Cover Flange in Brass FM-W28IR001](https://www.fairviewmicrowave.com/wr28-waveguide-isolator-16db-40ghz-fm-w28ir001-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr28-waveguide-isolator-16db-40ghz-fm-w28ir001-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		02/28/2023		DMAY		SPONG	

Fairview Microwave®
an INFINITE® brand

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

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

DESCRIPTION: WR-28 WAVEGUIDE ISOLATOR, 26.5-40GHZ

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FM-W28IR001

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

TOLERANCES:
 .X = ±.2 [5] | FRACTIONS ±.132
 .XX = ±.02 [.5] | ANGLES ± 1°
 .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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.