

WR-22 Waveguide Isolator with 25 dB min Isolation from 33 GHz to 50 GHz using Round Cover UG-383/U Flange

The FMWIR1004 is a Waveguide Faraday Isolator offering 25 dB minimum isolation over the full Q band frequency range of 33 to 50 GHz. In a conventional isolator design, three or four parts would be needed to cover the full WR-22 band to achieve this level of isolation. The Faraday design achieves high isolation with wide band performance. This gold plated WR-22 waveguide component uses UG-383/U round cover flanges on all ports and has a power rating of 1 watt in the forward direction.

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.



Features:

- Waveguide Faraday Isolator
- WR-22
- Full Q Band Frequency Range 33 to 50 GHz
- UG-383/U Round Cover Flange
- 1.4:1 VSWR

Applications:

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

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	33		50	GHz
Insertion Loss			1.5	dB
Isolation	25	30		dB
VSWR			1.4:1	
Forward Power, CW			1	Watts

Mechanical Specifications

Size	
Length	2.5 in [63.5 mm]
Height	0.94 in [23.88 mm]
Configuration	
Design	Faraday
Waveguide Size	WR-22
Flange Designation	UG-383/U
Flange Type	Round Cover

Environmental Specifications

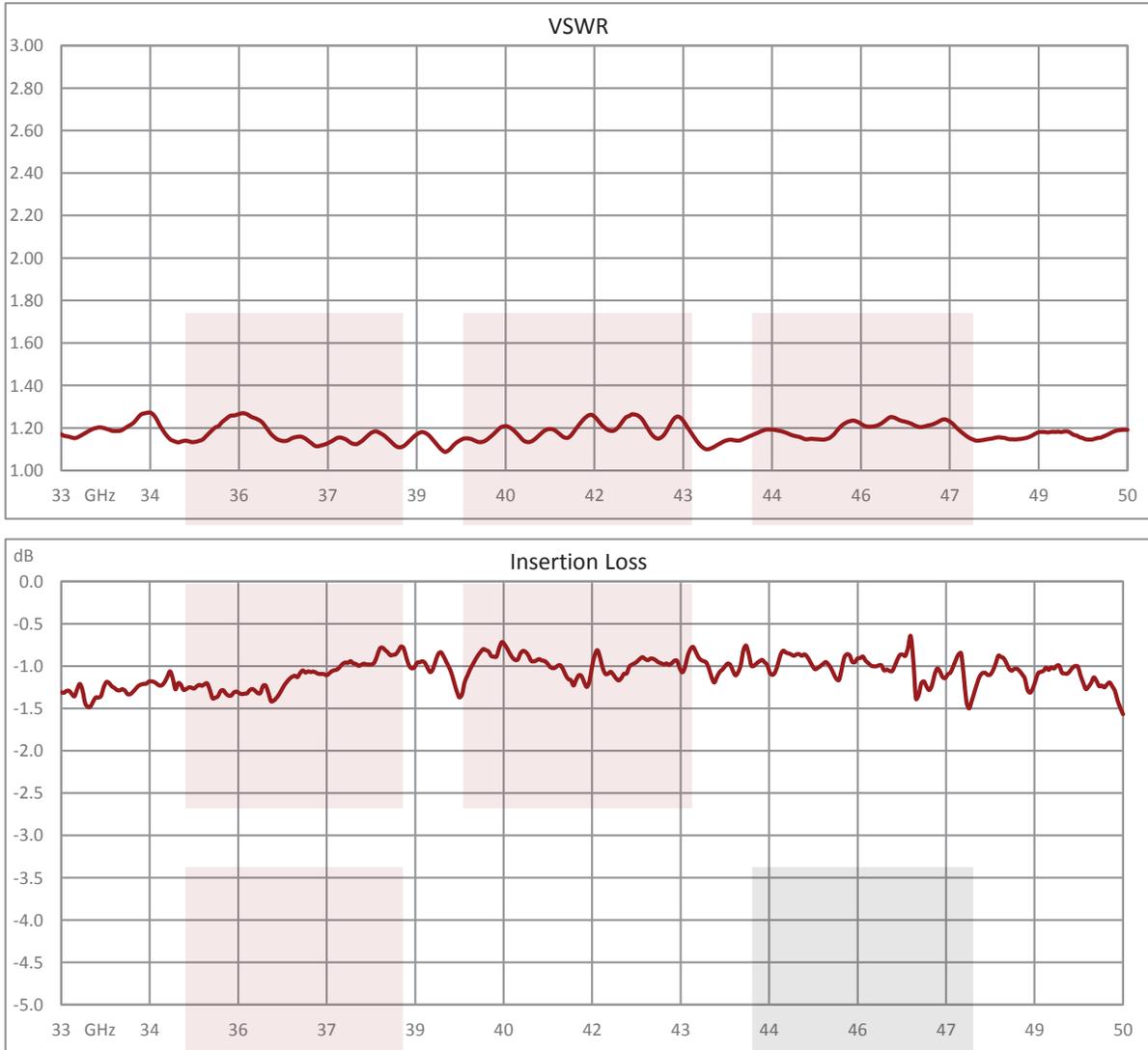
Compliance Certifications (see [product page](#) for current document)

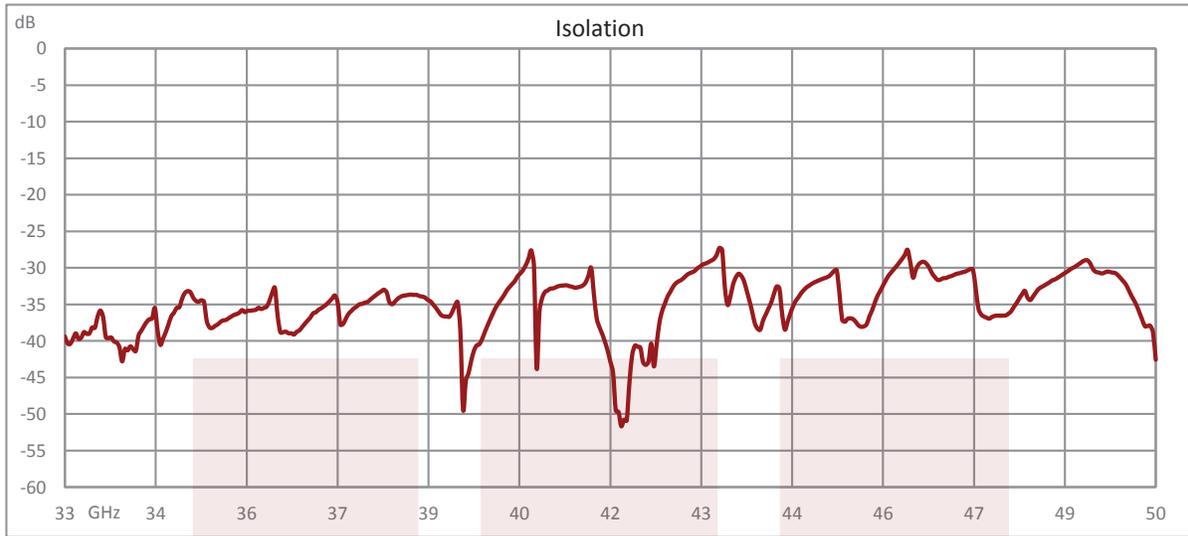
Plotted and Other Data

Notes:

Fairview Microwave
 1130 Junction Dr. #100
 Allen, TX 75013
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



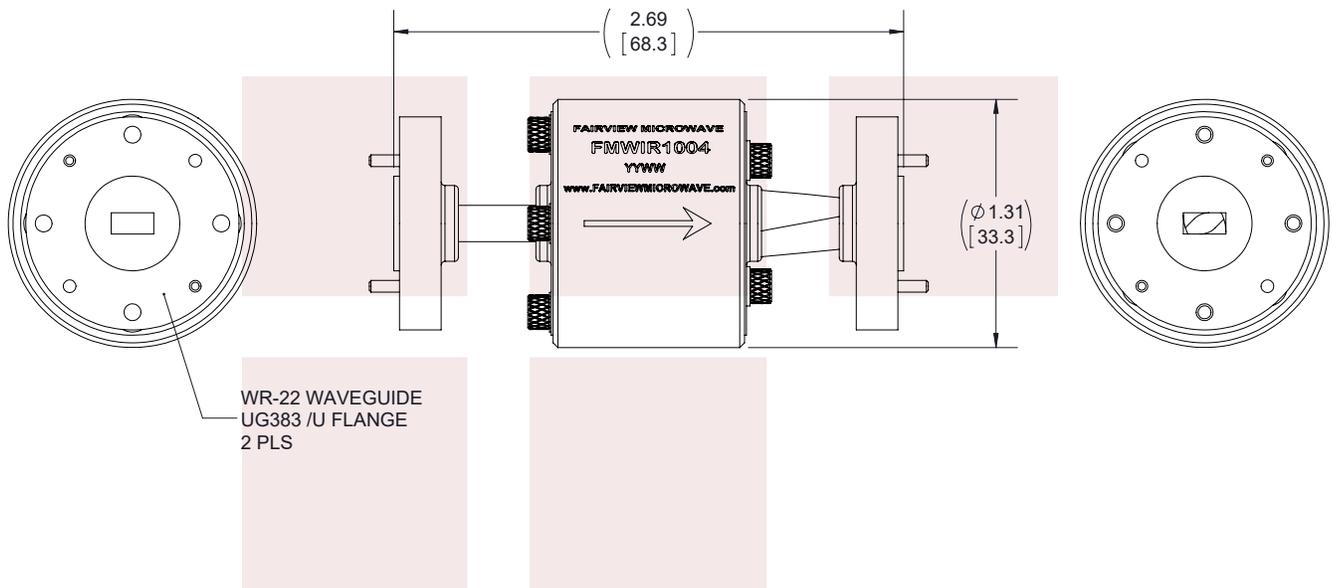


WR-22 Waveguide Isolator with 25 dB min Isolation from 33 GHz to 50 GHz using Round Cover UG-383/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

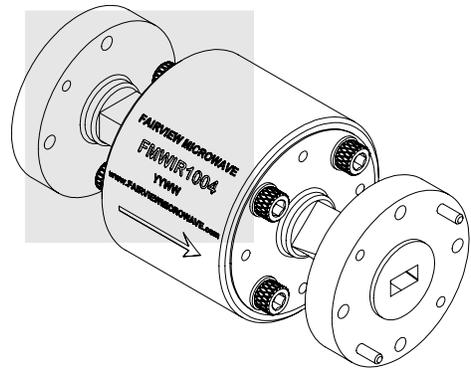
For additional information on this product, please click the following link: [WR-22 Waveguide Isolator with 25 dB min Isolation from 33 GHz to 50 GHz using Round Cover UG-383/U Flange FMWIR1004](#)

URL: <https://www.fairviewmicrowave.com/wr-22-waveguide-isolator-25-db-50-ghz-ug383-fmwir1004-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.



WR-22 WAVEGUIDE
 UG383 /U FLANGE
 2 PLS



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY
 ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].						
TITLE WR-22 Waveguide Isolator with 25 dB min Isolation from 33 GHz to 50 GHz using Round Cover UG-383/U Flange		DWG NO FMWIR1004		CAGE CODE 3FKR5				
CAD FILE	100517	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361