

WR-15 Waveguide Isolator with 25 dB min Isolation from 50 GHz to 75 GHz using Round Cover UG-385/U Flange

The FMWIR1002 is a Waveguide Faraday Isolator offering 25 dB minimum isolation over the full V band frequency range of 50 to 75 GHz. In a conventional isolator design, three or four parts would be needed to cover the full WR-15 band to achieve this level of isolation. The Faraday design achieves high isolation with wide band performance. This gold plated WR-15 waveguide component uses UG-385/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-15
- Full V Band Frequency Range 50 to 75 GHz
- UG-385/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	50		75	GHz
Insertion Loss			1.8	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-15
Flange Designation	UG-385/U
Flange Type	Round Cover

Environmental Specifications

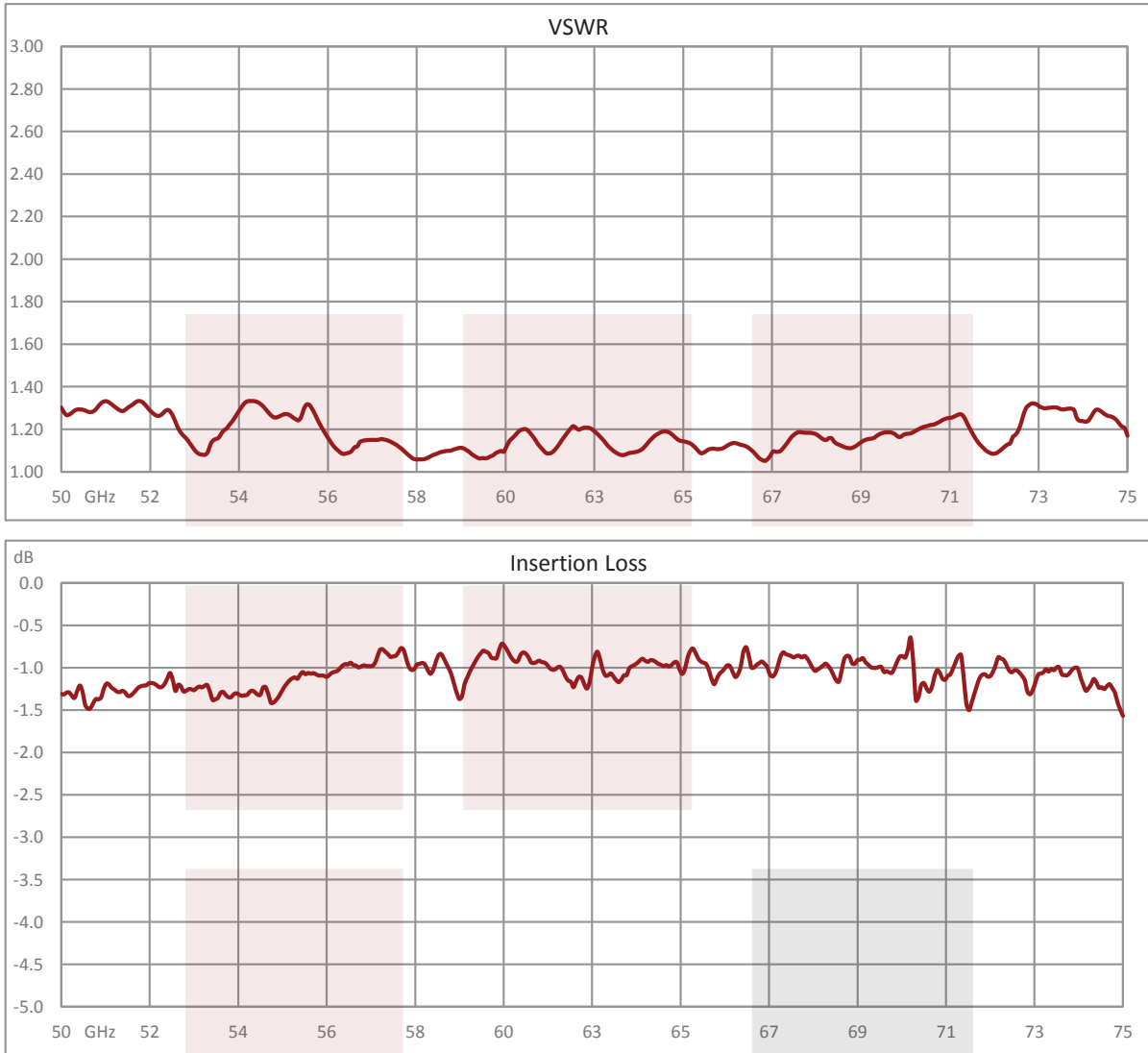
Compliance Certifications (see [product page](#) for current document)

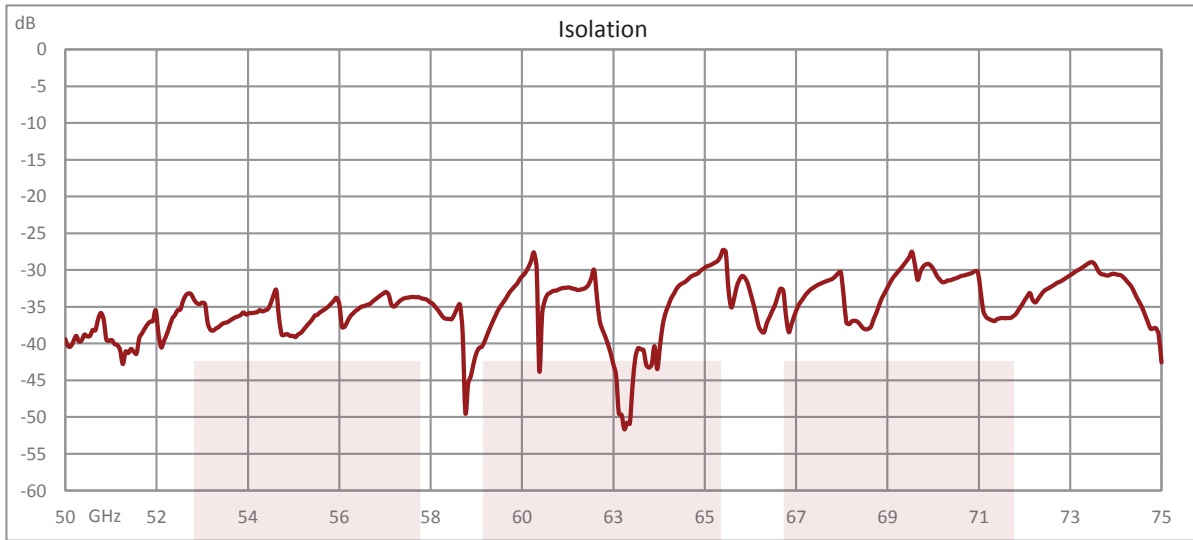
Plotted and Other Data

Notes:

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Typical Performance Data



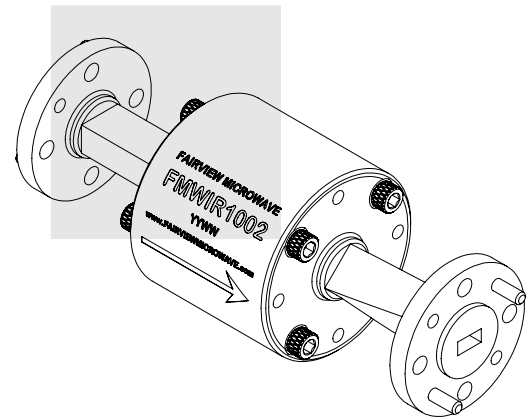
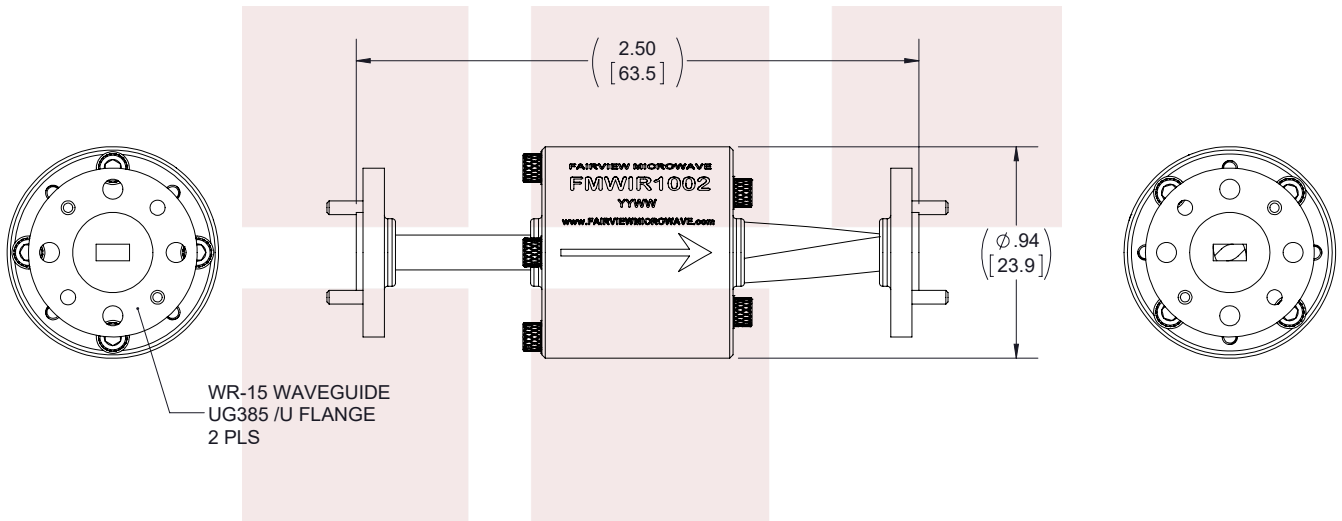


WR-15 Waveguide Isolator with 25 dB min Isolation from 50 GHz to 75 GHz using Round Cover UG-385/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-15 Waveguide Isolator with 25 dB min Isolation from 50 GHz to 75 GHz using Round Cover UG-385/U Flange FMWIR1002](#)

URL: <https://www.fairviewmicrowave.com/wr-15-waveguide-isolator-25-db-75-ghz-ug385-fmwir1002-p.aspx>

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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-15 Waveguide Isolator with 25 dB min Isolation from 50 GHz to 75 GHz using Round Cover UG-385/U Flange		DWG NO FMWIR1002		CAGE CODE 3FKR5				
CAD FILE	100517	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361