

WR-12 Waveguide Isolator with 25 dB min Isolation from 60 GHz to 90 GHz using Round Cover UG-387/U Flange

The FMWIR1001 is a Waveguide Faraday Isolator offering 25 dB minimum isolation over the full E band frequency range of 60 to 90 GHz. In a conventional isolator design, three or four parts would be needed to cover the full WR-12 band to achieve this level of isolation. The Faraday design achieves high isolation with wide band performance. This gold plated WR-12 waveguide component uses UG-387/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-12
- Full E Band Frequency Range 60 to 90 GHz
- UG-387/U Round Cover Flange
- 1.5:1 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	60		90	GHz
Insertion Loss			2	dB
Isolation	25	30		dB
VSWR			1.5:1	
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-12
Flange Designation	UG-387/U
Flange Type	Round Cover

Environmental Specifications

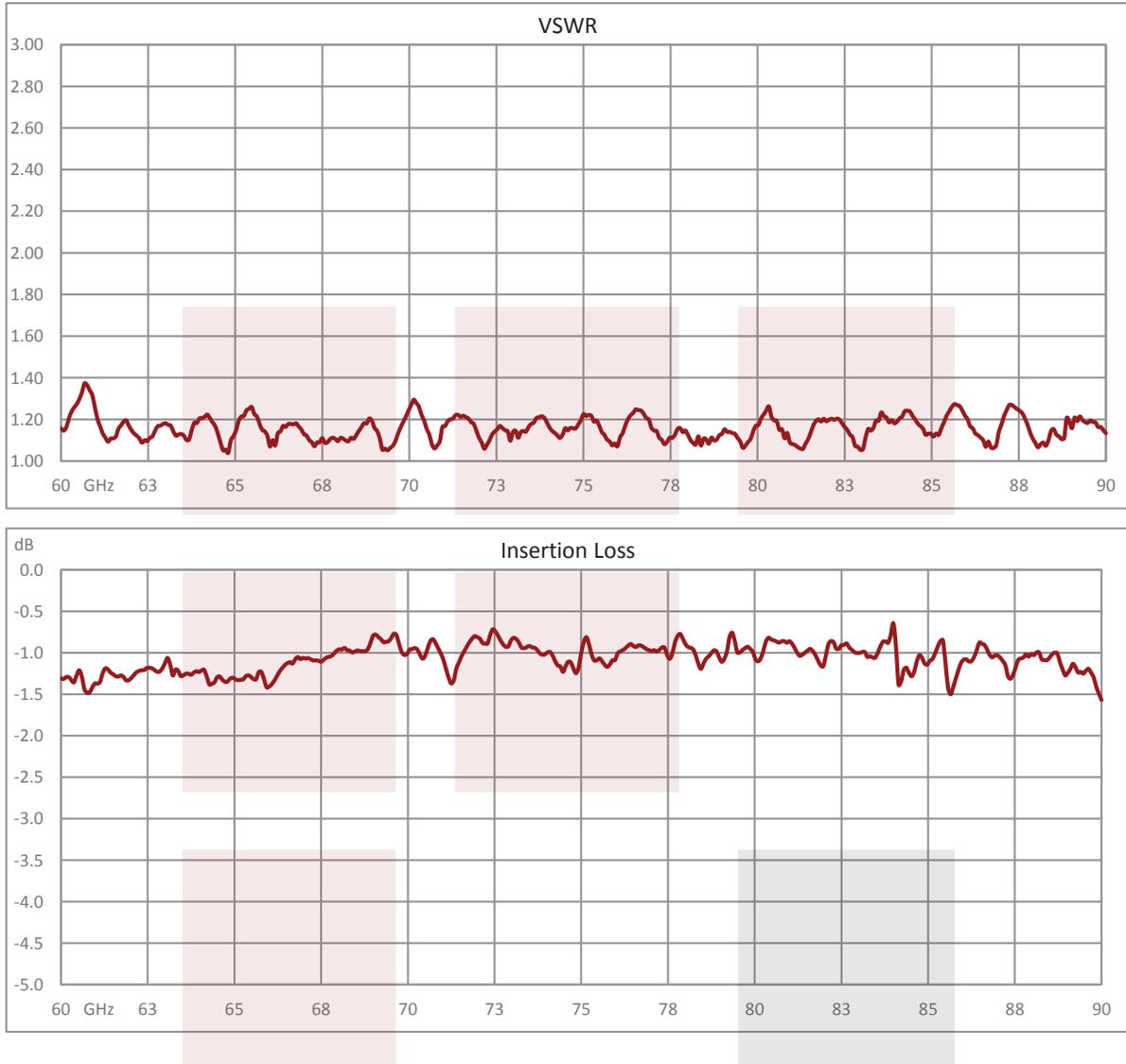
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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Typical Performance Data





WR-12 Waveguide Isolator with 25 dB min Isolation from 60 GHz to 90 GHz using Round Cover UG-387/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-12 Waveguide Isolator with 25 dB min Isolation from 60 GHz to 90 GHz using Round Cover UG-387/U Flange FMWIR1001](#)

URL: <https://www.fairviewmicrowave.com/wr-12-waveguide-isolator-25-db-90-ghz-ug387-fmwir1001-p.aspx>

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