

WR-12 Waveguide Isolator with 15 dB min Isolation from 76 GHz to 78 GHz using UG-387/U Cover Flange in Brass

The FM-W12IR002 is a Waveguide Isolator offering 15 dB minimum isolation over the E band frequency range of 76 to 78 GHz. The design achieves high isolation with wide band performance and the WR-12 waveguide uses UG-387/U Cover compatible flanges on all ports and has a power rating of 2 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	76		78	GHz
Insertion Loss			0.8	dB
Isolation	15			dB
VSWR			1.4:1	
Forward Power (CW)			2	Watts
Forward Power (Peak)			20	Watts
Reverse Power (CW)			0.2	Watts
Reverse Power (Peak)			2	Watts

Mechanical Specifications

Size

Length	1 in [25.4 mm]
Width	0.94 in [23.88 mm]
Height	0.79 in [20.07 mm]
Weight	0.1 lbs [45.36 g]

Configuration

Waveguide Size	WR-12
Flange Designation	UG-387/U
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:

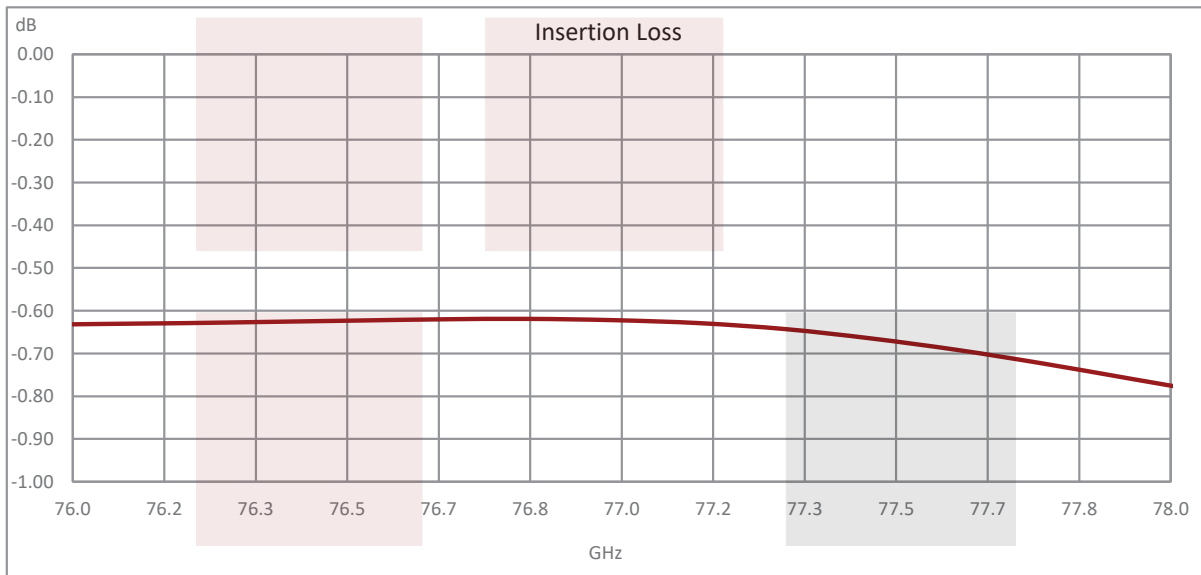
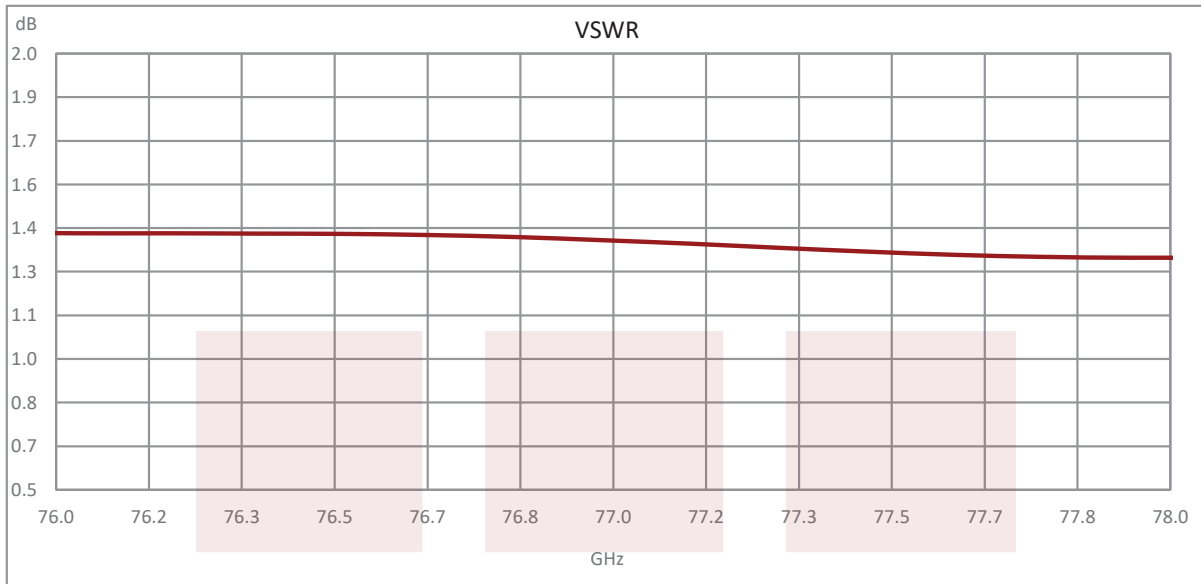
- WR-12 Waveguide Isolator
- E Band Frequency Range 76 to 78 GHz
- UG-387/U Flange Configuration
- Maximum VSWR 1.4:1
- Minimum 15 dB isolation
- Maximum Forward Power 2 W (CW)

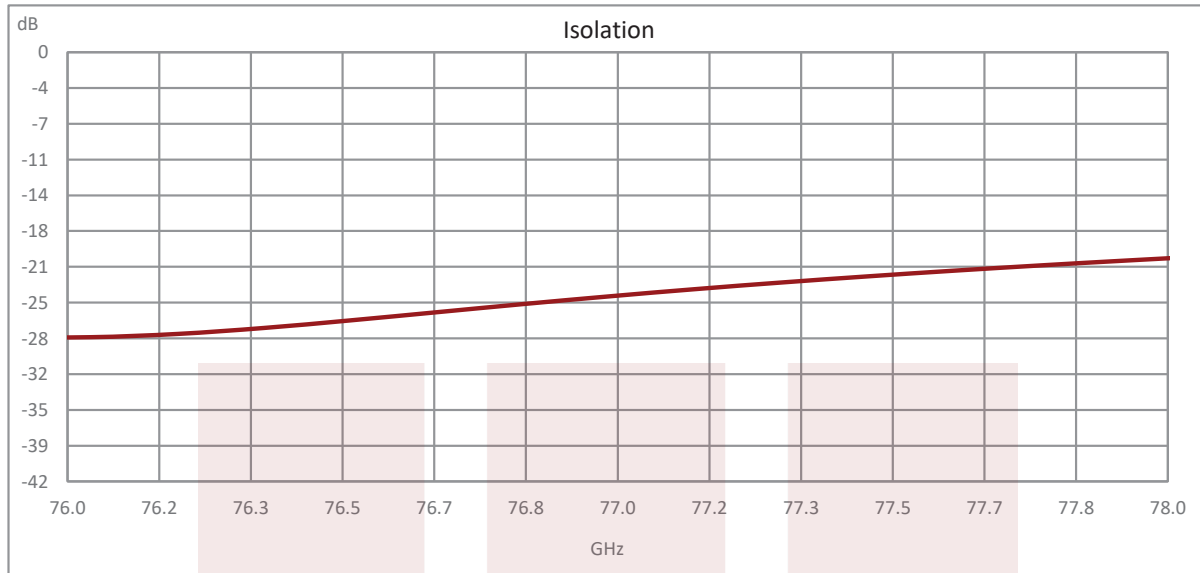
Applications:

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

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Typical Performance Data





WR-12 Waveguide Isolator with 15 dB min Isolation from 76 GHz to 78 GHz using UG-387/U 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-12 Waveguide Isolator with 15 dB min Isolation from 76 GHz to 78 GHz using UG-387/U Cover Flange in Brass FM-W12IR002](#)

URL: <https://www.fairviewmicrowave.com/-waveguide-isolator-15db-78ghz-ug387-fm-w12ir002-p.aspx>

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