

## WR-22 Waveguide Isolator with 15 dB min Isolation from 40 GHz to 46 GHz using UG-383/U Cover Flange in Brass

The FM-W22IR002 is a Waveguide Isolator offering 15 dB minimum isolation over the Q band frequency range of 40 to 46 GHz. The design achieves high isolation with wide band performance and the WR-22 waveguide uses UG-383/U Cover compatible flanges on all ports and has a power rating of 5 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	40		46	GHz
Insertion Loss			0.4	dB
Isolation	15			dB
VSWR			1.4:1	
Forward Power (CW)			5	Watts
Forward Power (Peak)			50	Watts
Reverse Power (CW)			0.5	Watts
Reverse Power (Peak)			5	Watts

### Mechanical Specifications

Size	
Length	1.5 in [38.1 mm]
Width	1.18 in [29.97 mm]
Height	0.87 in [22.1 mm]
Weight	0.1 lbs [45.36 g]

Configuration	
Waveguide Size	WR-22
Flange Designation	UG-383/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:

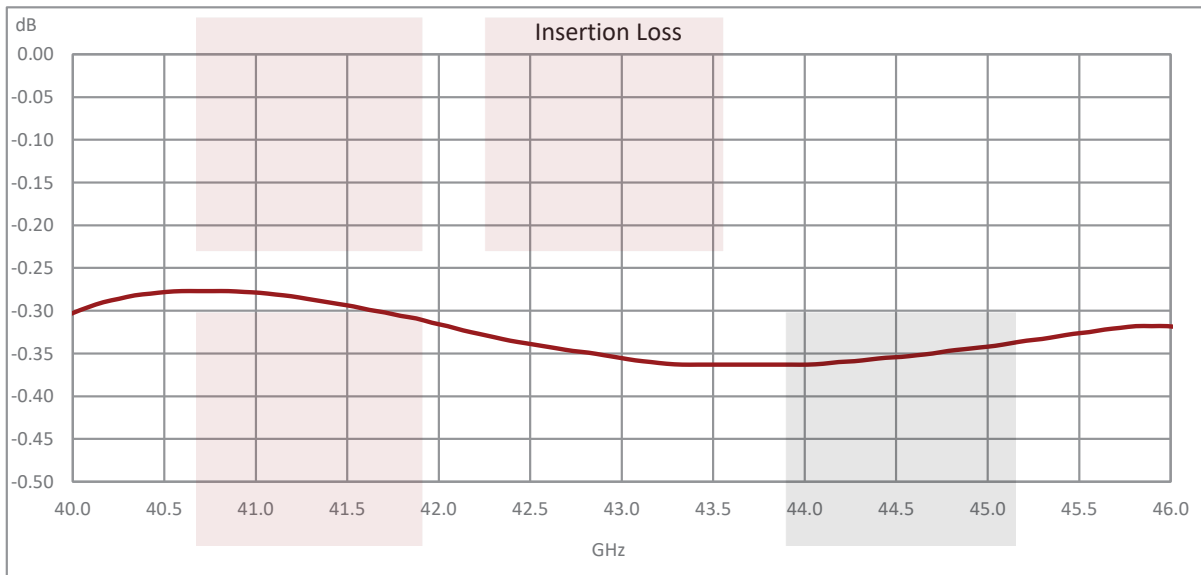
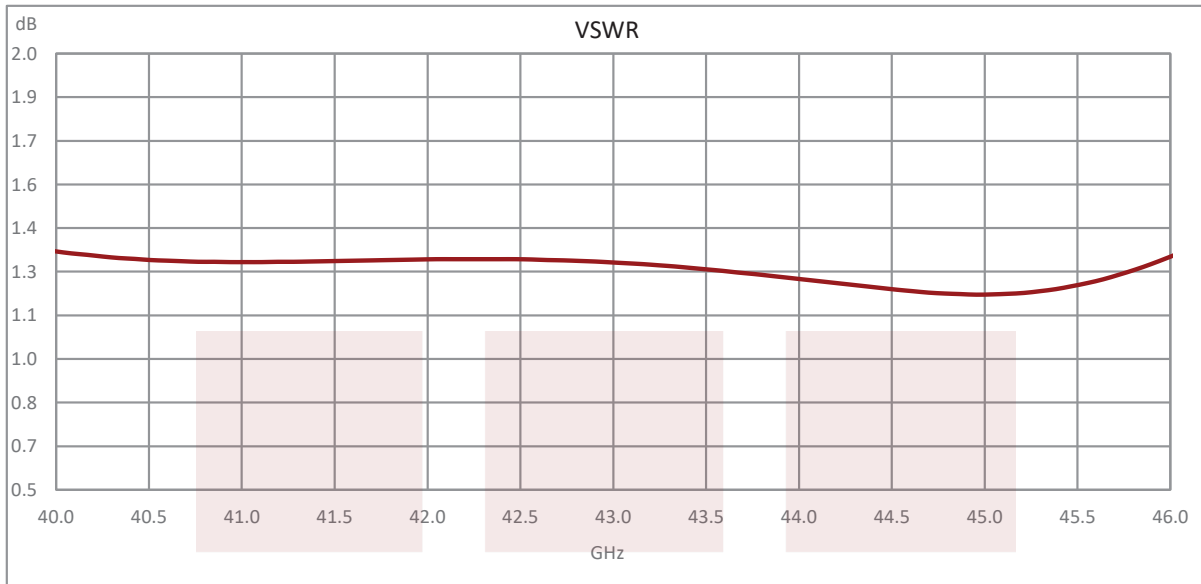
- WR-22 Waveguide Isolator
- Q Band Frequency Range 40 to 46 GHz
- UG-383/U Flange Configuration
- Maximum VSWR 1.4:1
- Minimum 15 dB isolation
- Maximum Forward Power 5 W (CW)

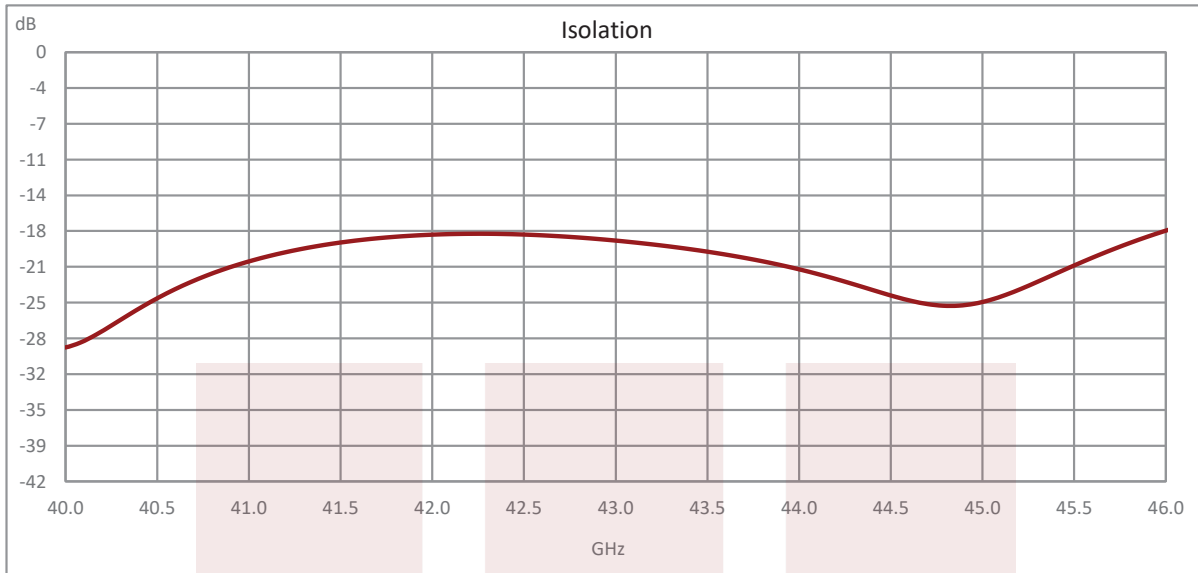
### Applications:

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

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**Typical Performance Data**





WR-22 Waveguide Isolator with 15 dB min Isolation from 40 GHz to 46 GHz using UG-383/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-22 Waveguide Isolator with 15 dB min Isolation from 40 GHz to 46 GHz using UG-383/U Cover Flange in Brass FM-W22IR002](#)

URL: <https://www.fairviewmicrowave.com/wr22-waveguide-isolator-15db-46ghz-ug383-fm-w22ir002-p.aspx>

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