

WR-15 Waveguide Isolator with 15 dB min Isolation from 56 GHz to 61 GHz using UG-385/U Cover Flange in Brass

The FM-W15IR003 is a Waveguide Isolator offering 15 dB minimum isolation over the V band frequency range of 56 to 61 GHz. The design achieves high isolation with wide band performance and the WR-15 waveguide uses UG-385/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 | 56 | | 61 | GHz |
| Insertion Loss | | | 0.6 | dB |
| Isolation | 15 | | | dB |
| VSWR | | | 1.4:1 | |
| Forward Power (CW) | | | 5 | Watts |
| Forward Power (Peak) | | | 30 | Watts |
| Reverse Power (CW) | | | 0.5 | Watts |
| Reverse Power (Peak) | | | 3 | Watts |

Mechanical Specifications

Size

| | |
|--------|--------------------|
| Length | 1.06 in [26.92 mm] |
| Width | 0.87 in [22.1 mm] |
| Height | 0.75 in [19.05 mm] |
| Weight | 0.1 lbs [45.36 g] |

Configuration

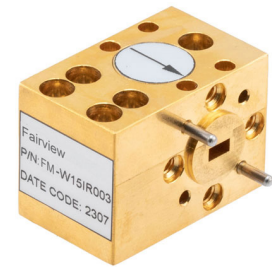
| | |
|---------------------------|-------------|
| Waveguide Size | WR-15 |
| Flange Designation | UG-385/U |
| Flange Type | Cover |
| Body Material and Plating | Brass, Gold |

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

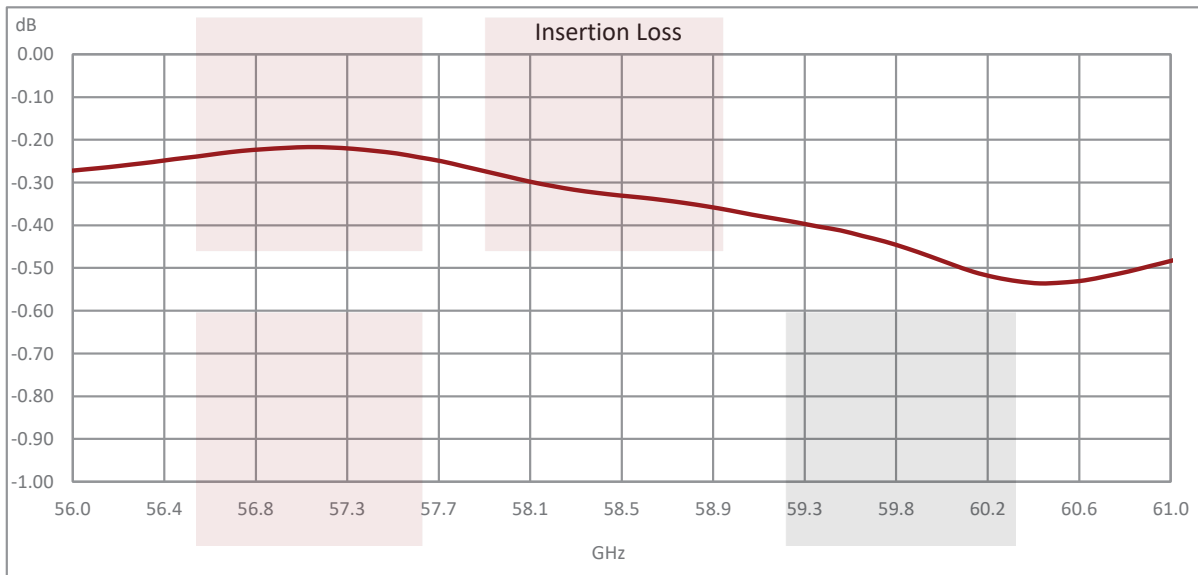
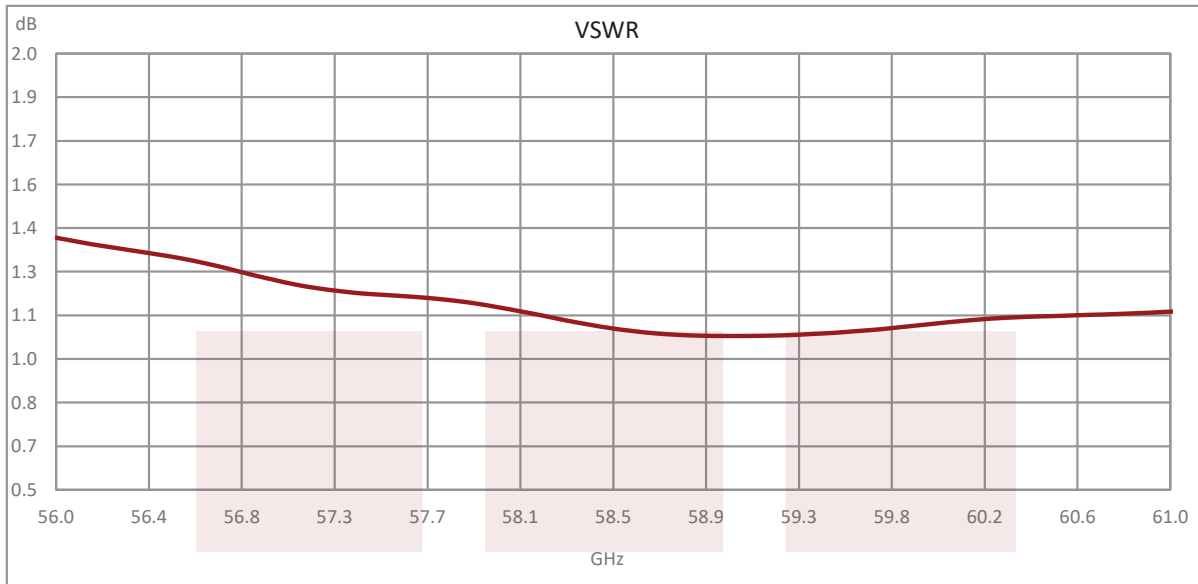
- WR-15 Waveguide Isolator
- V Band Frequency Range 56 to 61 GHz
- UG-385/U Flange Configuration
- Maximum VSWR 1.4:1
- Minimum 15 dB isolation
- Maximum Forward Power 5 W (CW)

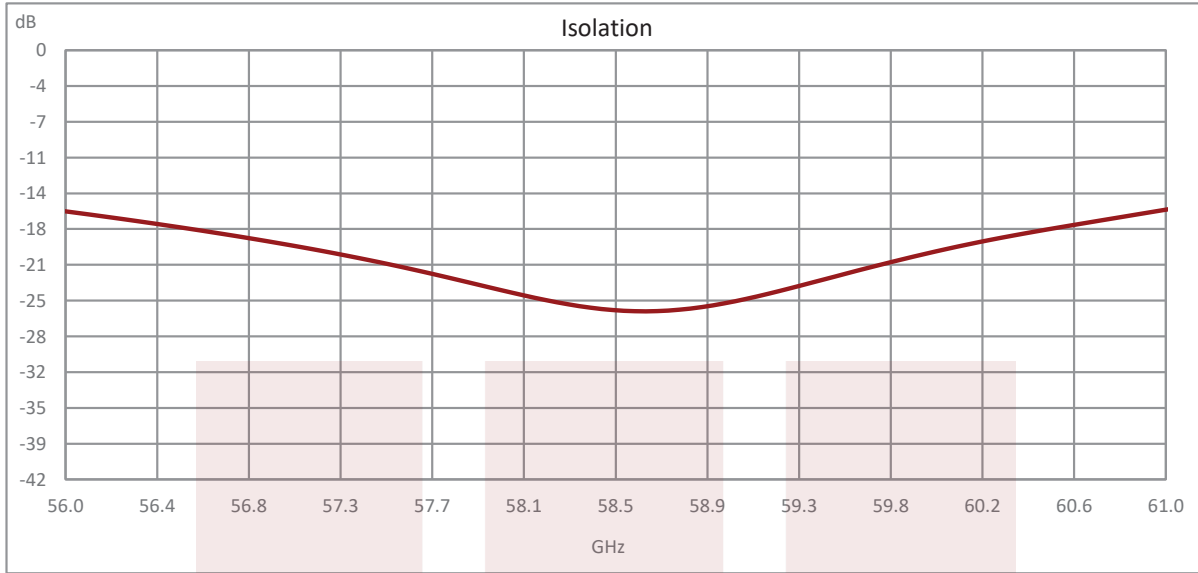
Applications:

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

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Typical Performance Data





WR-15 Waveguide Isolator with 15 dB min Isolation from 56 GHz to 61 GHz using UG-385/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-15 Waveguide Isolator with 15 dB min Isolation from 56 GHz to 61 GHz using UG-385/U Cover Flange in Brass FM-W15IR003](#)

URL: <https://www.fairviewmicrowave.com/wr15-waveguide-isolator-15db-61ghz-ug385-fm-w15ir003-p.aspx>

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