

## WR-12 Waveguide Isolator with 15 dB min Isolation from 64.5 GHz to 66.5 GHz using UG-387/U Cover Flange in Brass

The FM-W12IR001 is a Waveguide Isolator offering 15 dB minimum isolation over the E band frequency range of 64.5 to 66.5 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      | 64.5 |     | 66.5  | 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:

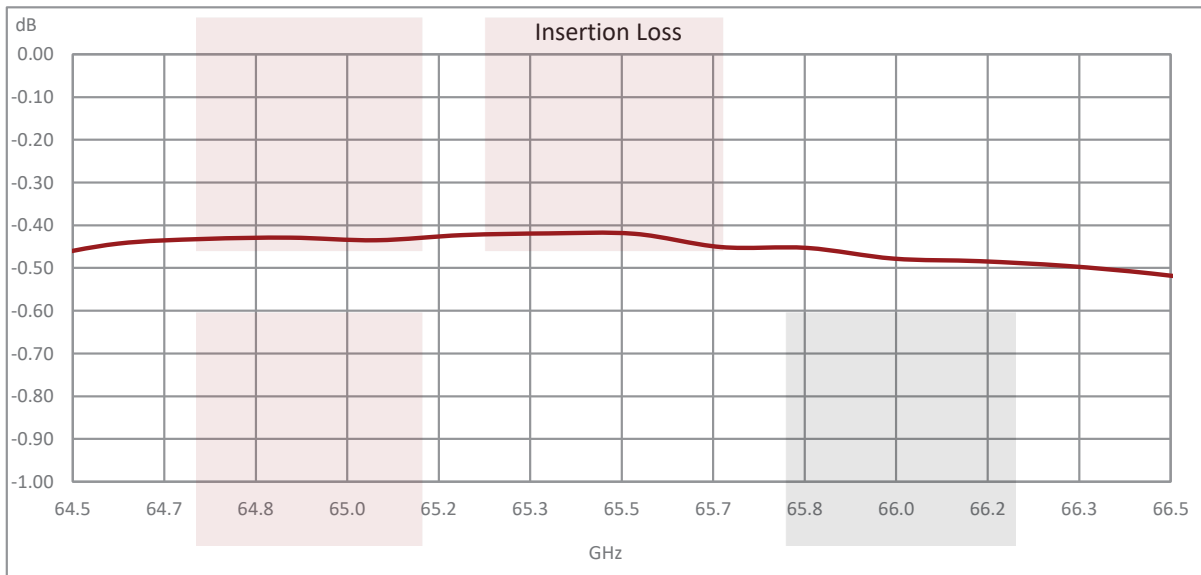
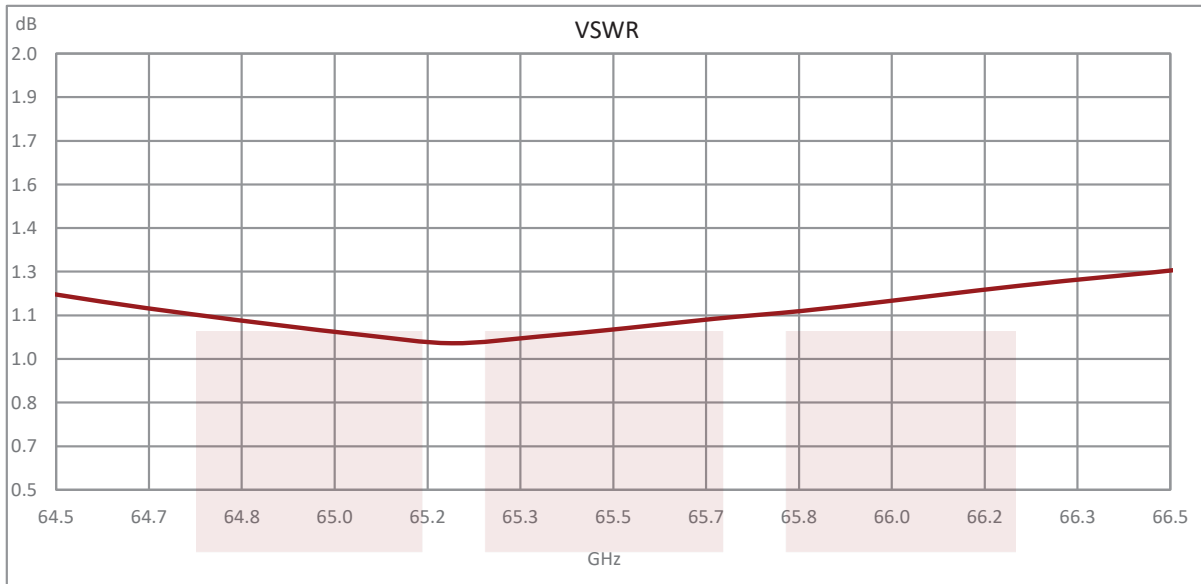
- WR-12 Waveguide Isolator
- E Band Frequency Range 64.5 to 66.5 GHz
- UG-387/U Flange Configuration
- Maximum VSWR 1.4:1
- Minimum 15 dB isolation
- Maximum Forward Power 2 W (CW)

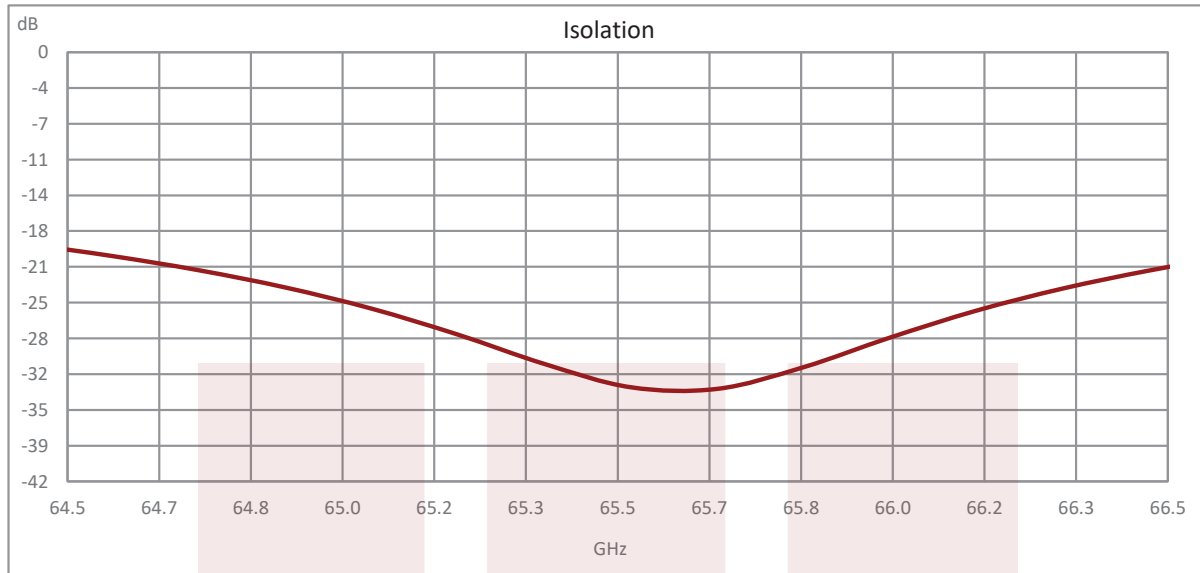
### Applications:

- 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 64.5 GHz to 66.5 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 64.5 GHz to 66.5 GHz using UG-387/U Cover Flange in Brass FM-W12IR001](#)

URL: <https://www.fairviewmicrowave.com/-waveguide-isolator-15db-66.5ghz-ug387-fm-w12ir001-p.aspx>

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