

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

The FM-W12CR001 is a Waveguide Circulator 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 compatible flanges on all ports and has a power rating of 2 watts (CW).

Fairview Microwave offers a wide variety of circulators and waveguide circulators to fit your needs. These unique devices enable two signals to use one channel. The classic use of this three port device is for the line between an antenna and a transceiver, allowing the receive signal to come from the antenna (port 1) to the receiver (port 2) while the transmit signal goes from the transmitter (port 3) to the antenna (port 1). An isolator can be created by terminating one port into a matched load. These components can be used in antenna transmitting and receiving, radar, amplifier systems and anything that requires isolation from a signal reflection and the ability to send signals in opposite directions down a single channel. These circulators feature excellent insertion loss, high isolation and reliability.



**Features:**

- WR-12 Waveguide Circulator
- 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 Power 2 W (CW)

**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	64.5		66.5	GHz
VSWR			1.4:1	
Insertion Loss			0.8	dB
Isolation	15			dB
Forward Power (CW)			2	Watts
Input Power (Peak)			20	Watts

**Mechanical Specifications**

Size	
Length	1.15 in [29.21 mm]
Width	0.79 in [20.07 mm]
Height	1.1 in [27.94 mm]
Weight	0.15 lbs [68.04 g]
Waveguide Size	WR-12
Flange Designation	UG-387/U
Flange Type	Cover
Flange Material and Plating	Brass, Gold

**Environmental Specifications**

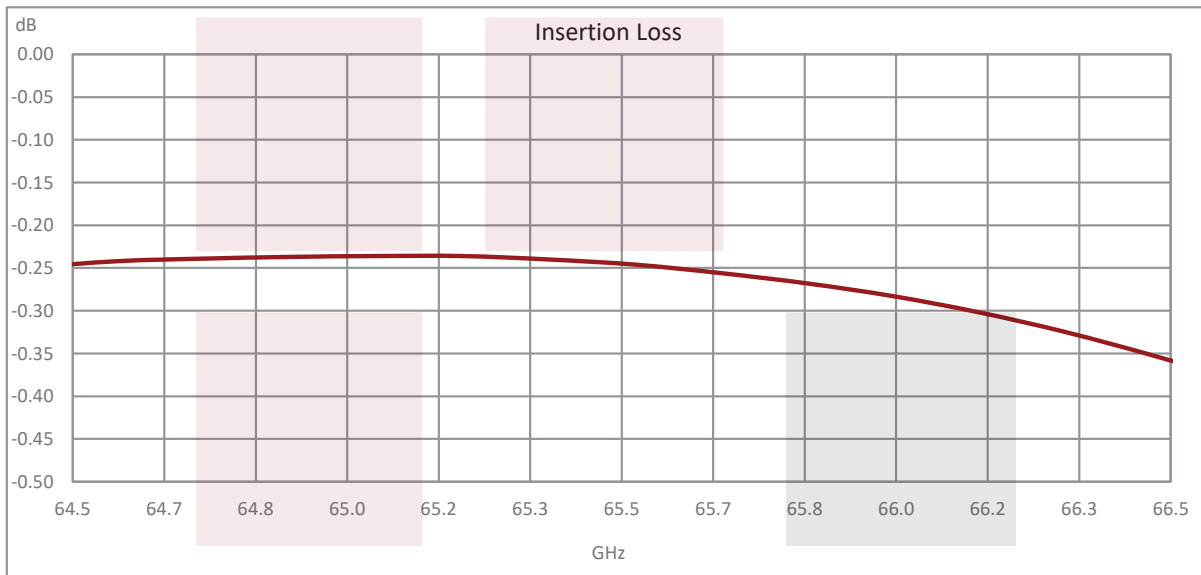
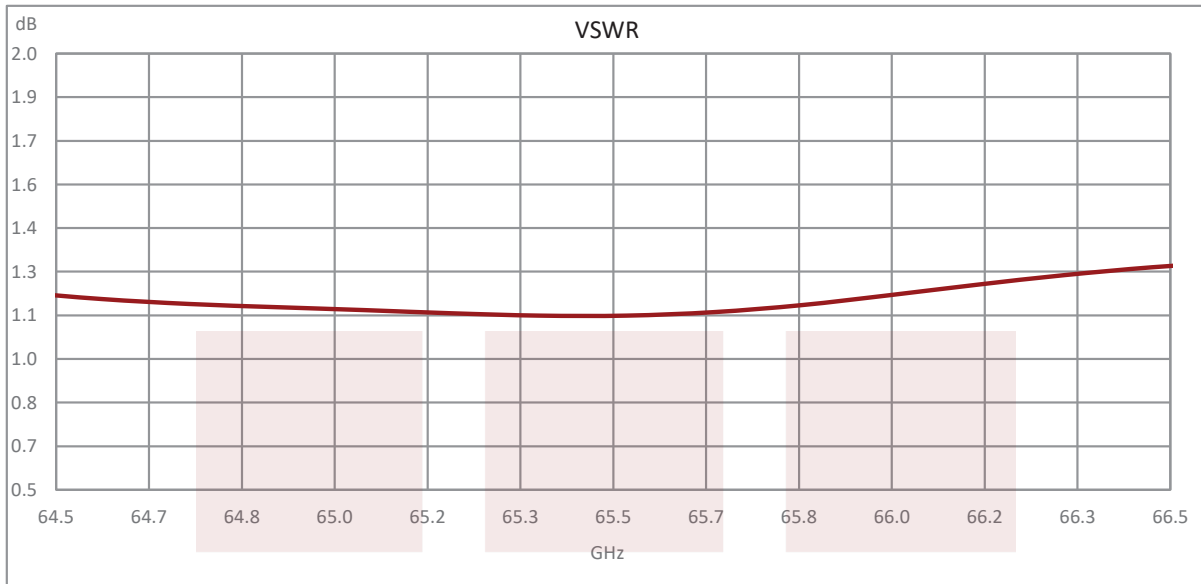
**Compliance Certifications** (see [product page](#) for current document)

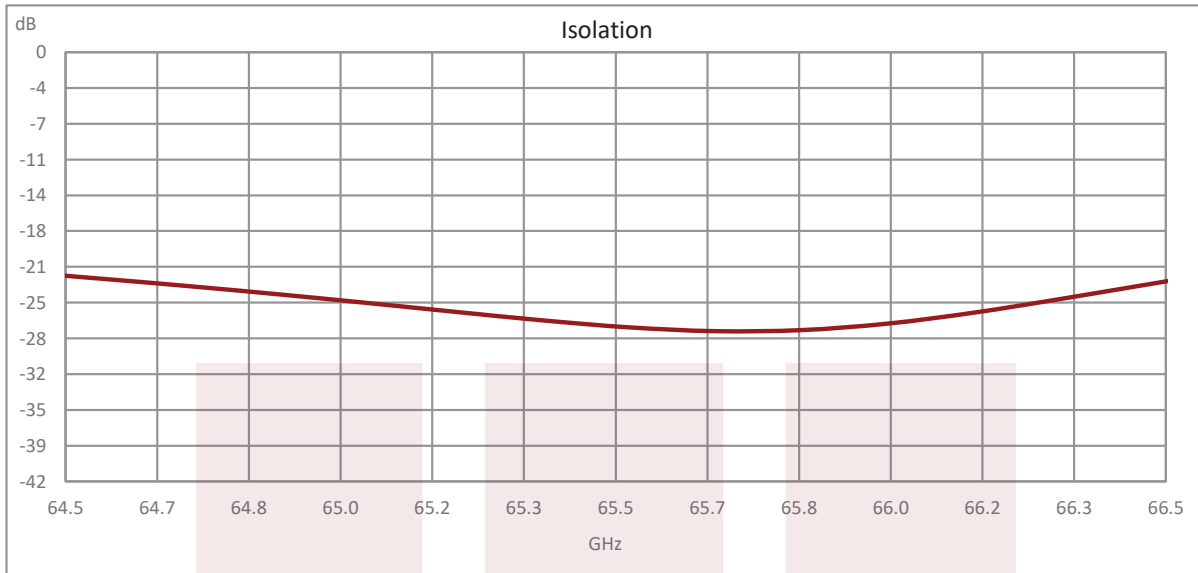
**Plotted and Other Data**

Notes:

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**Typical Performance Data**



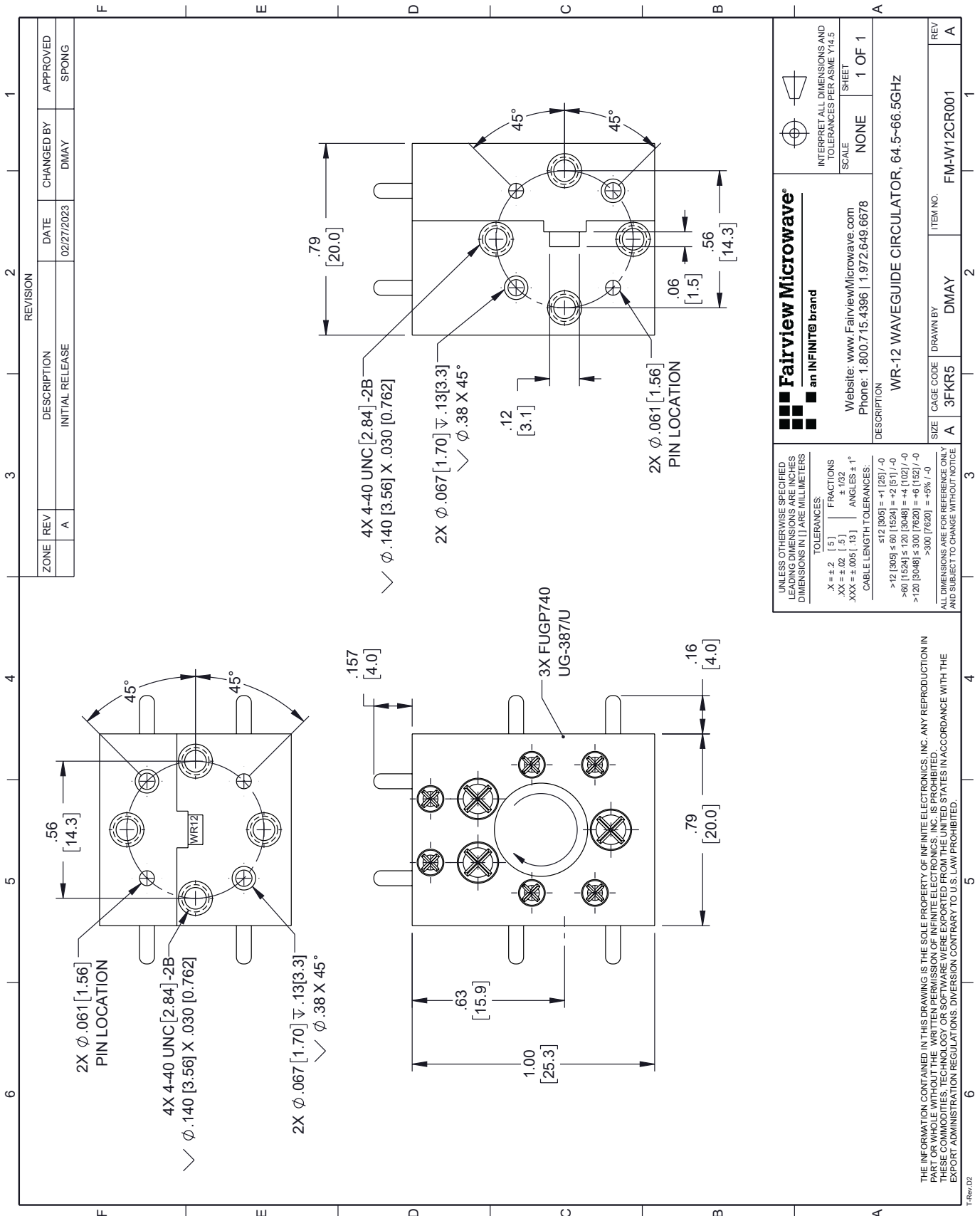


WR-12 Waveguide Circulator with 15 dB min Isolation from 64.5 GHz to 66.5 GHz using UG-387/U Cover Flange in Brass from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-12 Waveguide Circulator with 15 dB min Isolation from 64.5 GHz to 66.5 GHz using UG-387/U Cover Flange in Brass FM-W12CR001](https://www.fairviewmicrowave.com/wr12-waveguide-circulator-15db-66.5-ghz-ug387-cover-flange-brass-fm-w12cr001-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr12-waveguide-circulator-15db-66.5-ghz-ug387-cover-flange-brass-fm-w12cr001-p.aspx>

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