

## FMWIR1015 DATA SHEET

# WR-22 Waveguide Isolator with 25 dB Typ Isolation from 26.5 GHz to 40 GHz using Square Cover UG-599/U Flange

The FMWIR1015 is a Waveguide Faraday Isolator offering 25 dB typical isolation over the full Ka band frequency range of 26.5 to 40 GHz. In a conventional isolator design, three or four parts would be needed to cover the full WR-28 band to achieve this level of isolation. The Faraday design achieves high isolation with wide band performance. This gold plated WR-28 waveguide component uses UG-599/U square cover flanges on all ports and has a power rating of 2 watt in the forward direction.

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 band high isolation and reliability.



## **Features:**

- Waveguide Faraday Isolator
- WR-28 Waveguide
- Full Ka Band Frequency Range 26.5 to 40 GHz
- UG-599/U Square Cover Flange
- 1.3:1 VSWR
- 25 dB isolation across the full band

## **Applications:**

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

**Electrical Specifications** 

Description	Min	Тур	Max	Units
Frequency Range	26.5		40	GHz
Insertion Loss		1		dB
Isolation		25		dB
VSWR		1.3:1		
Forward Power (CW)			2	Watts

## **Mechanical Specifications**

Size

 Length
 3.43 in [87.12 mm]

 Height
 1.244 in [31.6 mm]

 Weight
 0.2895 lbs [131.31 g]

Configuration

Design Faraday
Waveguide Size WR-28
Flange Designation UG-599/U
Flange Type Square Cover
Body Material and Plating Brass Copper, Gold

### **Environmental Specifications**

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com

sales@fairviewmicrowave.com





WR-22 Waveguide Isolator with 25 dB Typ Isolation from 26.5 GHz to 40 GHz using Square Cover UG-599/U Flange 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.

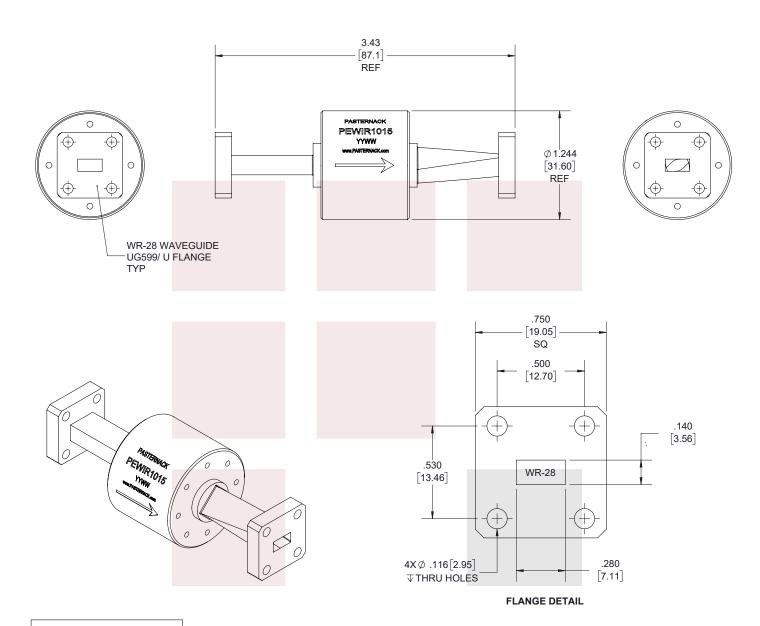
For additional information on this product, please click the following link: WR-22 Waveguide Isolator with 25 dB Typ Isolation from 26.5 GHz to 40 GHz using Square Cover UG-599/U Flange FMWIR1015

URL: https://www.fairviewmicrowave.com/wr-28-waveguide-isolator-25-db-40-ghz-ug599-fmwir1015-p.aspx









STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].						
WR-22 Waveguide Isolator with 25 dB Typ Isolation from 26.5 GHz to 40 GHz using Square Cover UG-599/U Flange	DWG NO FMWIR1015			CAGE CODE 3FKR5			
	CAD FILE 08/01/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361	