





Microwave Radio Systems

Waveguide Isolators Technical Data Sheet

PEWIR1015

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

Description

The PEWIR1015 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.

Pasternack Enterprises 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. Pasternack's waveguide isolators feature excellent insertion loss, full band high isolation and reliability.

Electrical Specifications

Description	Minimum	Typical	Maximum	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
 0.288 lbs [130.63 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-28 Waveguide Isolator from 26.5 GHz to 40 GHz, 25 dB Typical Isolation, UG-599/U Square Cover Flange PEWIR1015

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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:

WR-28 Waveguide Isolator from 26.5 GHz to 40 GHz, 25 dB Typical Isolation, UG-599/U Square Cover Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/wr-28-waveguide-isolator-40-ghz-25-db-ug599-pewir1015-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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PEWIR1015 CAD Drawing

WR-28 Waveguide Isolator from 26.5 GHz to 40 GHz, 25 dB Typical Isolation, UG-599/U Square Cover Flange

