



WR-75 Waveguide Isolator from 9.84 GHz to 15 GHz,
20 dB min Isolation, Cover Flange, Aluminum

Waveguide Isolators Technical Data Sheet

PE-W75IR001

Features

- WR-75 Waveguide Isolator
- X Band Frequency Range 9.84 to 15 GHz
- UG Cover Flange Configuration
- Maximum VSWR 1.25:1
- Minimum 20 dB isolation
- Maximum Forward Power 100 W (CW)

Applications

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

Description

The PE-W75IR001 is a Waveguide Isolator offering 20 dB minimum isolation over the X band frequency range of 9.84 to 15 GHz. The design achieves high isolation with wide band performance and the WR-75 waveguide uses UG Square Cover compatible flanges on all ports and has a power rating of 100 watts (CW).

Pasternack 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 WR band high isolation and reliability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	9.84		15	GHz
Insertion Loss			0.3	dB
Isolation	20			dB
VSWR			1.25:1	
Forward Power (CW)			100	Watts
Forward Power (Peak)			3	kWatts
Reverse Power (CW)			10	Watts
Reverse Power (Peak)			300	Watts

Mechanical Specifications

Size	
Length	3.94 in [100.08 mm]
Width	1.97 in [50.04 mm]
Height	1.5 in [38.1 mm]
Weight	0.24 lbs [108.86 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-75 Waveguide Isolator from 9.84 GHz to 15 GHz, 20 dB min Isolation, Cover Flange, Aluminum PE-W75IR001](#)



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Configuration

Waveguide Size

Flange Type

Body Material and Plating

WR-75

Cover

Aluminum, Chromate

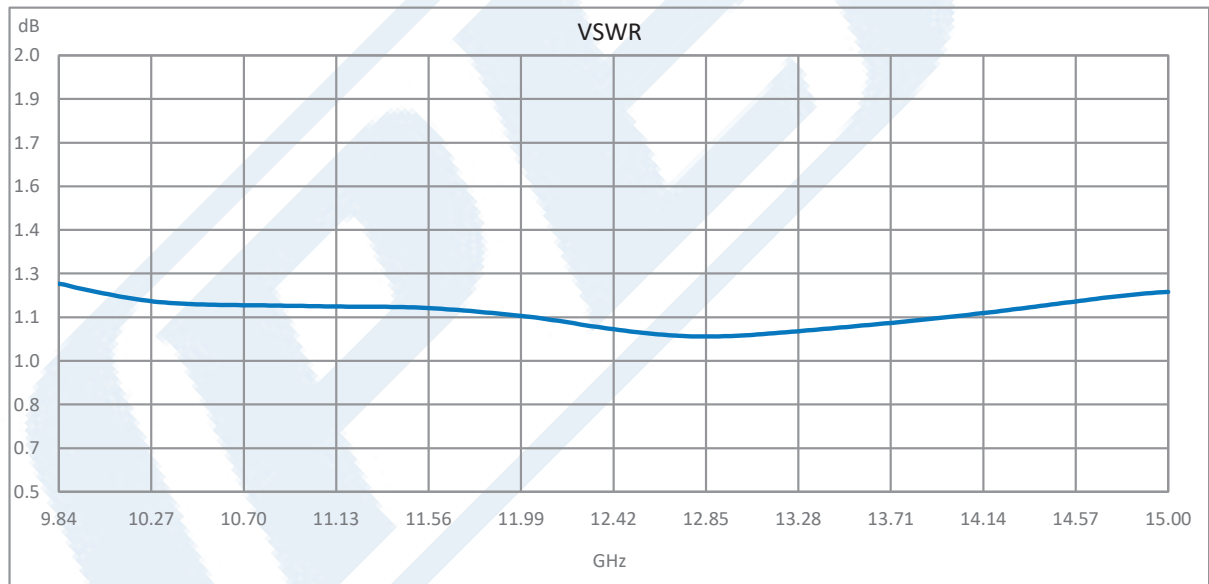
Environmental Specifications

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

Plotted and Other Data

Notes:

Typical Performance Data



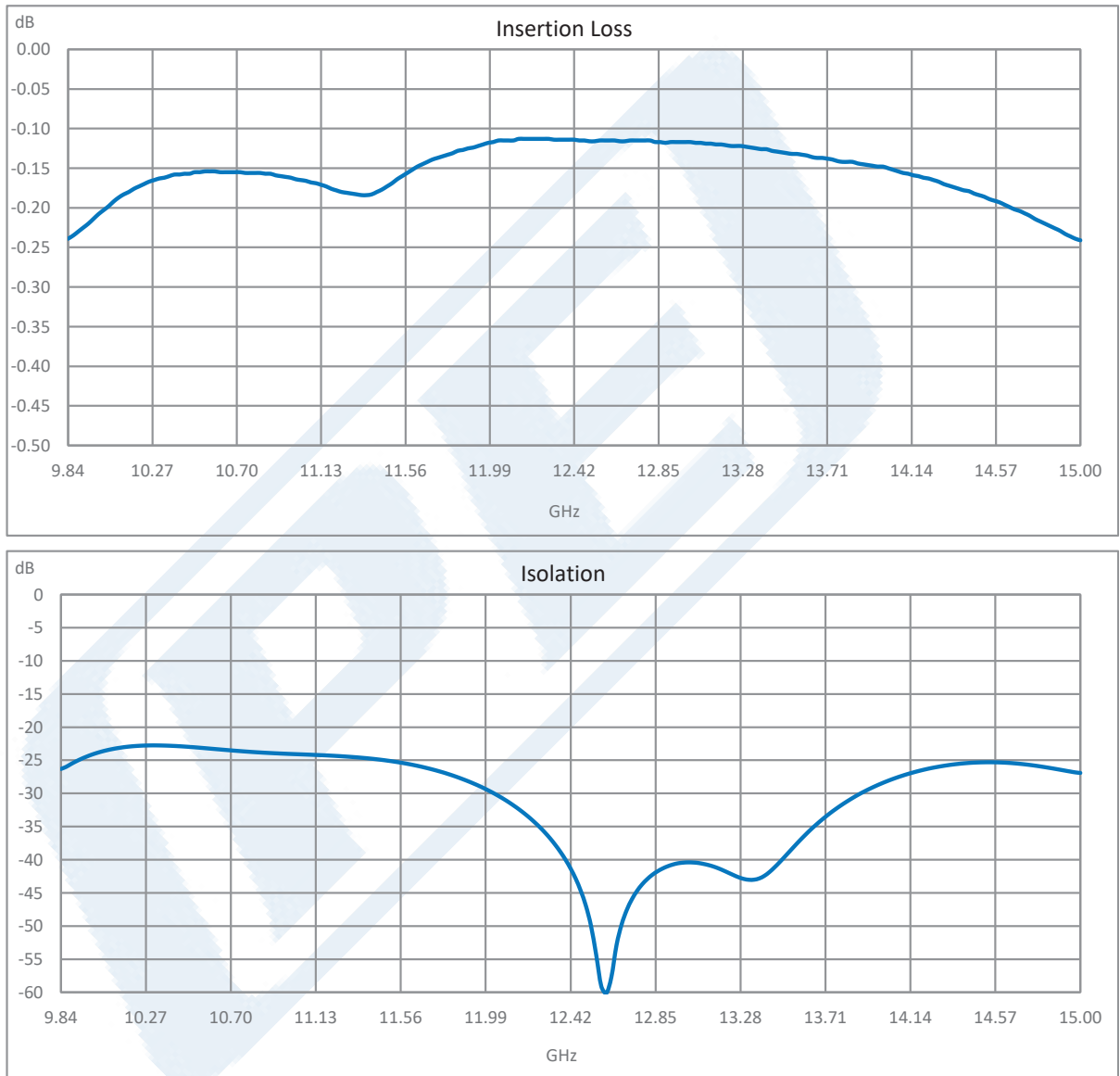
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WR-75 Waveguide Isolator from 9.84 GHz to 15 GHz, 20 dB min Isolation, Cover Flange, Aluminum from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

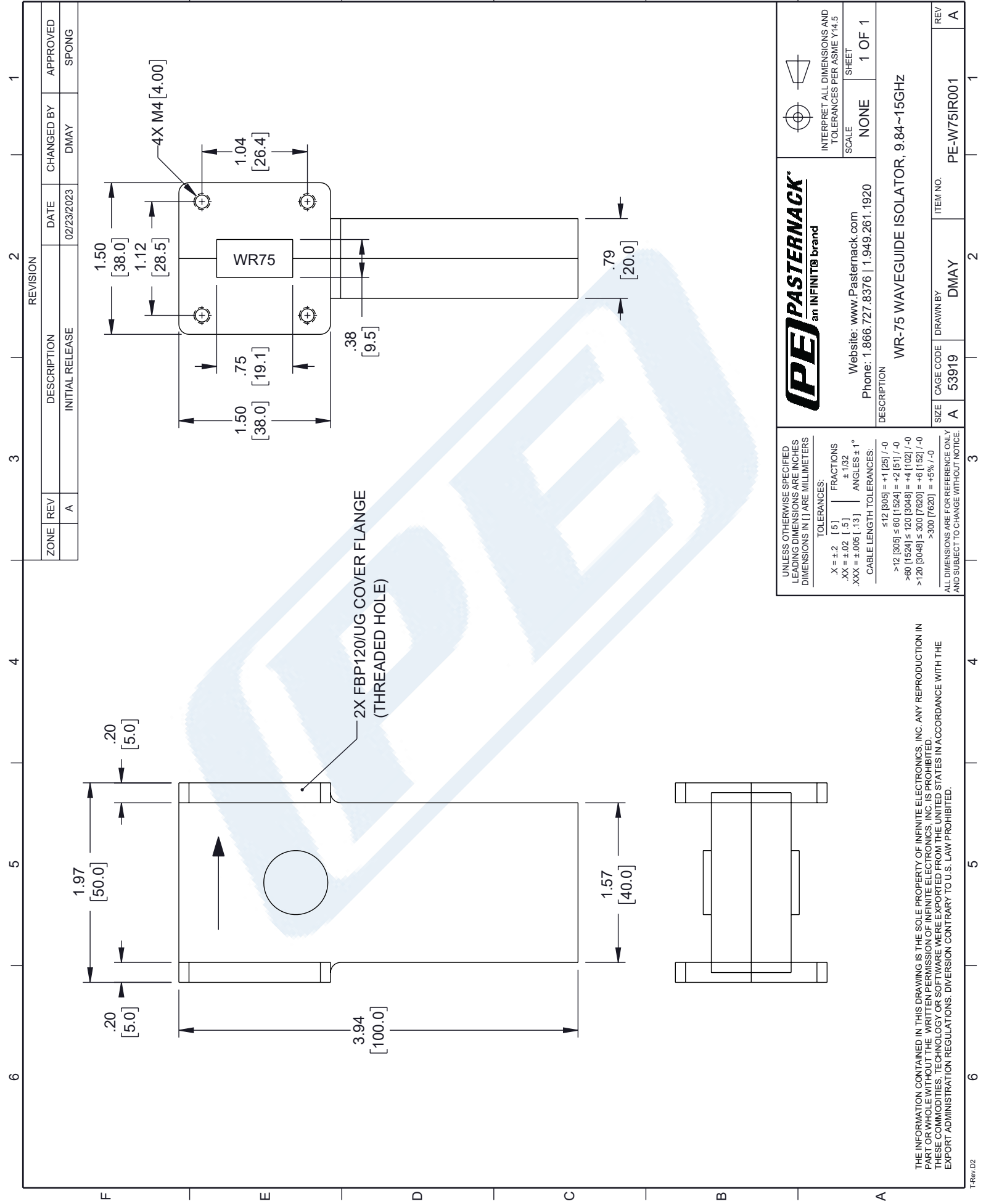
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE-W75IR001 CAD Drawing

WR-75 Waveguide Isolator from 9.84 GHz to 15 GHz, 20 dB min Isolation, Cover Flange, Aluminum



REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	02/23/2023

CHANGED BY	APPROVED
DMAY	SPONG

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION

WR-75 WAVEGUIDE ISOLATOR, 9.84~15GHZ

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE-W75IR001

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

X = ±.2	[.5]	FRACTIONS
.XX = ±.02	[.5]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

≤12 [305]	±.125 / -0
>12 [305] ≤ 60 [1524]	±.25 / -0
>60 [1524] ≤ 120 [3048]	±.5 / -0
>120 [3048] ≤ 300 [7620]	±1.0 / -0
>300 [7620]	±.5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE

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