



WR-137 Waveguide Isolator from 5.38 GHz to 8.17 GHz,
17 dB min Isolation, CPR137F Flange, Aluminum

Waveguide Isolators Technical Data Sheet

PE-W137IR001

Features

- WR-137 Waveguide Isolator
- C Band Frequency Range 5.38 to 8.17 GHz
- CPR137F Flange Configuration
- Maximum VSWR 1.35:1
- Minimum 17 dB isolation
- Maximum Forward Power 150 W (CW)

Applications

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

Description

The PE-W137IR001 is a Waveguide Isolator offering 17 dB minimum isolation over the C band frequency range of 5.38 to 8.17 GHz. The design achieves high isolation with wide band performance and the WR-137 waveguide uses CPR137F compatible flanges on all ports and has a power rating of 150 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	5.38		8.17	GHz
Insertion Loss			0.4	dB
Isolation	17			dB
VSWR			1.35:1	
Forward Power (CW)			150	Watts
Forward Power (Peak)			10	kWatts
Reverse Power (CW)			15	Watts
Reverse Power (Peak)			10	kWatts

Mechanical Specifications

Size	
Length	6.5 in [165.1 mm]
Width	3.34 in [84.84 mm]
Height	1.94 in [49.28 mm]
Weight	0.5 lbs [226.8 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-137 Waveguide Isolator from 5.38 GHz to 8.17 GHz, 17 dB min Isolation, CPR137F Flange, Aluminum PE-W137IR001](#)



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Configuration

Waveguide Size

WR-137

Flange Type

CPR-137F

Body Material and Plating

Aluminum, Chromate

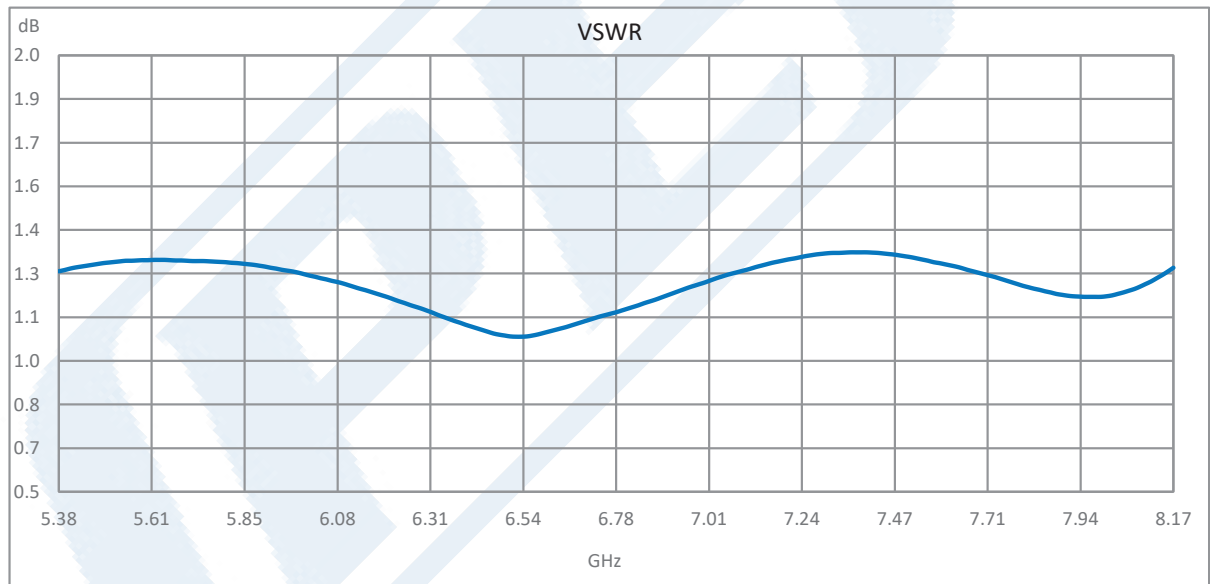
Environmental Specifications

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

Plotted and Other Data

Notes:

Typical Performance Data



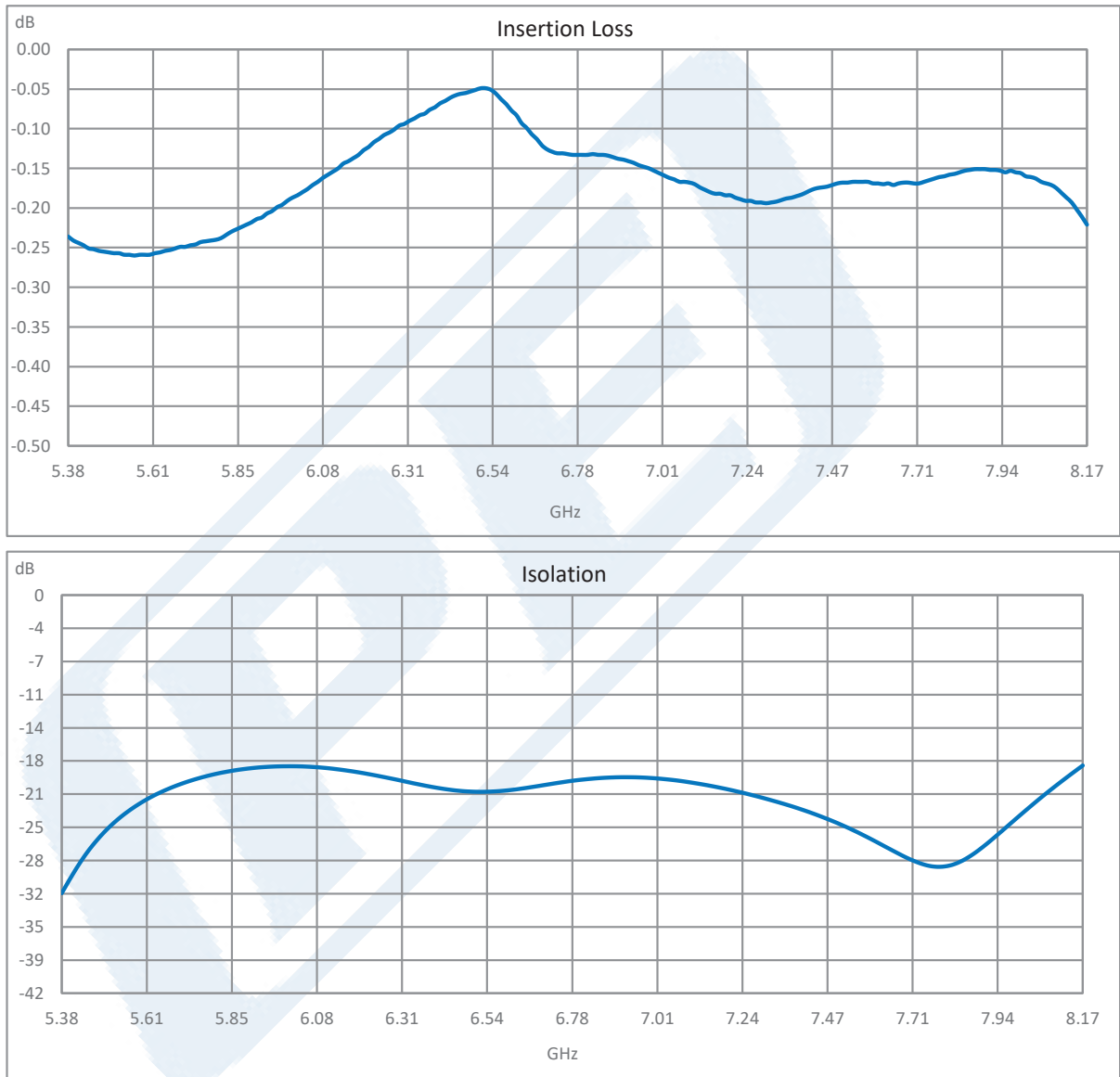
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WR-137 Waveguide Isolator from 5.38 GHz to 8.17 GHz, 17 dB min Isolation, CPR137F Flange, Aluminum from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

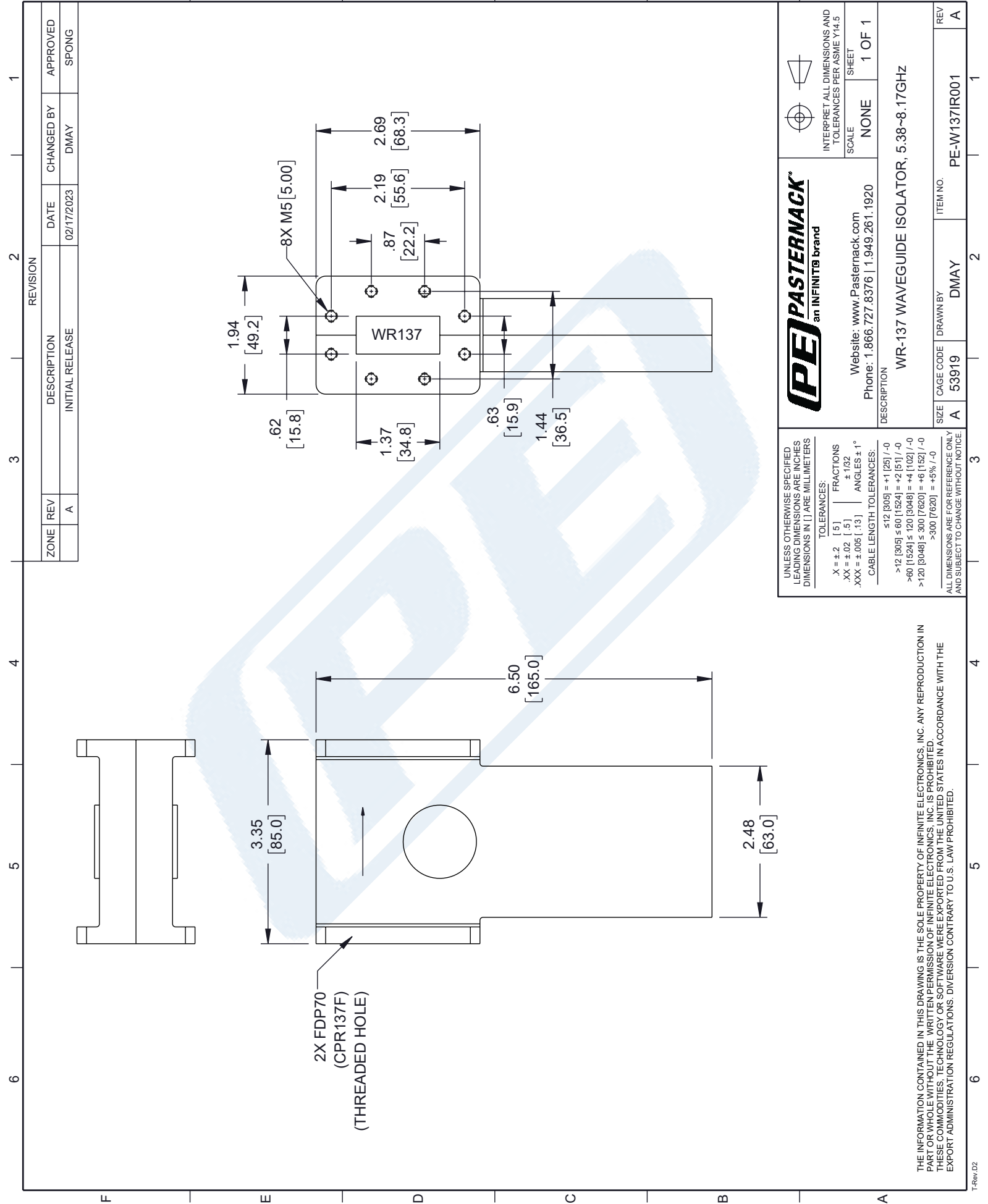
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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-W137IR001 CAD Drawing

WR-137 Waveguide Isolator from 5.38 GHz to 8.17 GHz, 17 dB min Isolation, CPR137F Flange, Aluminum



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	02/17/2023	DMAY	SPONG

PE PASTERNAK an INFINITI® brand Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
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°	SCALE NONE
CABLE LENGTH TOLERANCES: ≤12 [305] = ±1 [25] /-0 >12 [305] ≤ 60 [1524] = ±2 [51] /-0 >60 [1524] ≤ 120 [3048] = ±4 [102] /-0 >120 [3048] ≤ 300 [7620] = ±6 [152] /-0 >300 [7620] = ±5% /-0	SHEET 1 OF 1	DESCRIPTION WR-137 WAVEGUIDE ISOLATOR, 5.38~8.17GHz
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE	SIZE A 53919	ITEM NO. PE-W137IR001