



## High Power Isolator With 18 dB Isolation From 1 GHz to 2 GHz, 50 Watts And N Female

### TECHNICAL DATA SHEET

PE83IR1001

The PE83IR1001 is a high power isolator offering a forward and reverse power rating of 50 watts over an operational frequency band of 1 to 2 GHz. This coaxial part uses type N female connectors on all ports and has a minimum of 18 dB of isolation.

Pasternack Enterprises offers a wide variety of 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 isolators feature excellent insertion loss, high isolation and reliability.

- Forward/Reverse Power 50 watts
- Frequency Range of 1 to 2 GHz
- Female N Connectors
- Low VSWR

#### Applications

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

#### Configuration

Connector 1	N Female
Connector 2	N Female
Frequency Range	1 GHz to 2 GHz
Design	Single Junction
Layout	Connectorized

#### Electrical Specifications (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		2	GHz
Impedance		50		Ohms
Insertion Loss			0.6	dB
Forward Power			50	Watts
Reverse Power			50	Watts
Input VSWR			1.35:1	
Isolation	18			dB

#### Mechanical Specifications

<b>Temperature</b>	
Operating Range	10 to 40 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [High Power Isolator With 18 dB Isolation From 1 GHz to 2 GHz, 50 Watts And N Female PE83IR1001](#)



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**Size**

Length	2.6 in [66.04 mm]
Width	0.75 in [19.05 mm]
Height	2.6 in [66.04 mm]
Weight	0.7 lbs [317.51 g]

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

**Plotted and Other Data**

Notes:

- Values at 25 °C, sea level

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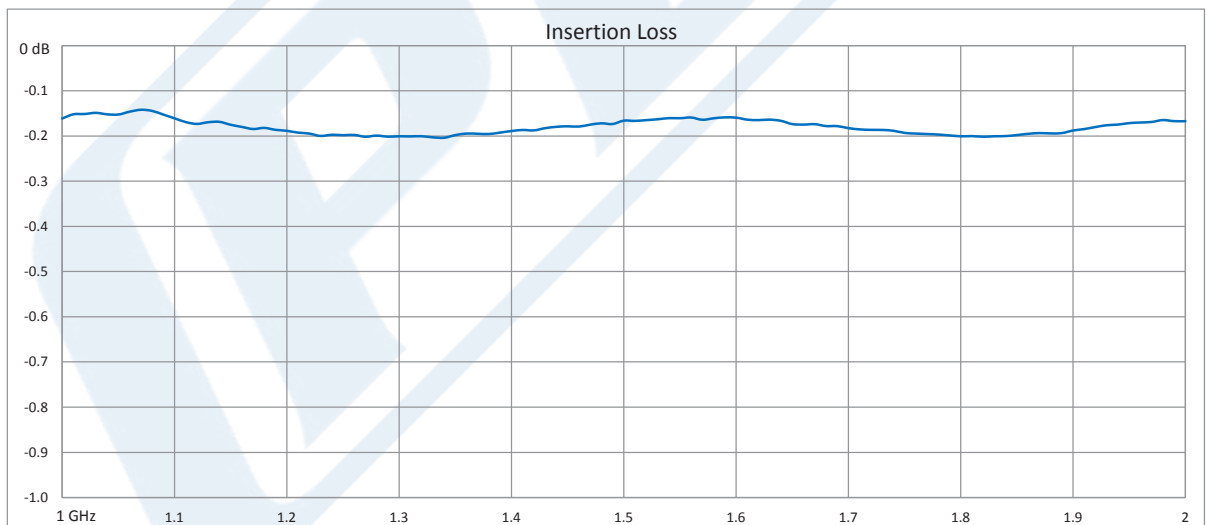
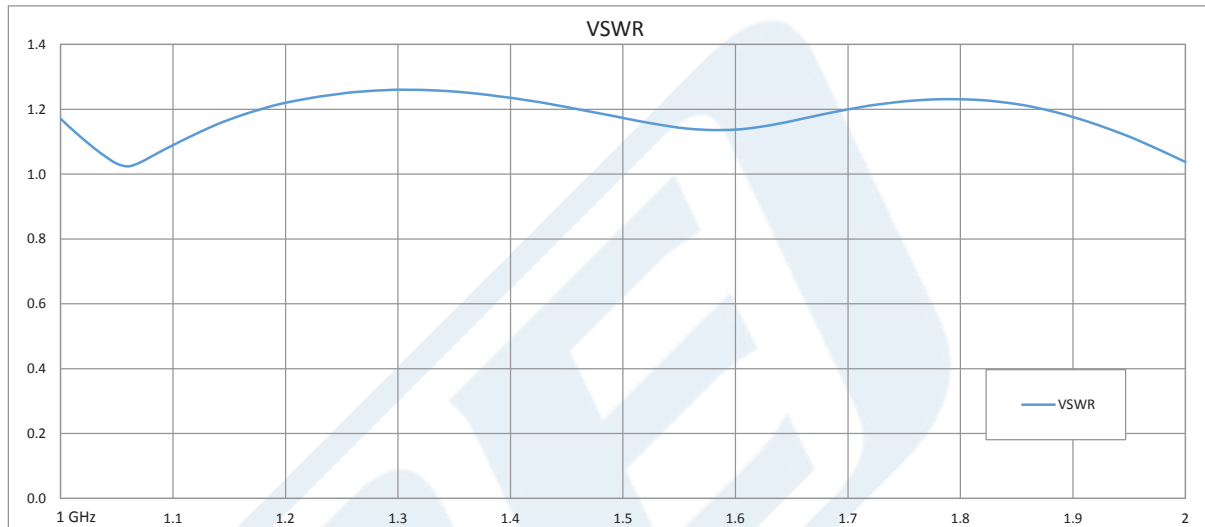


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Typical Performance Data



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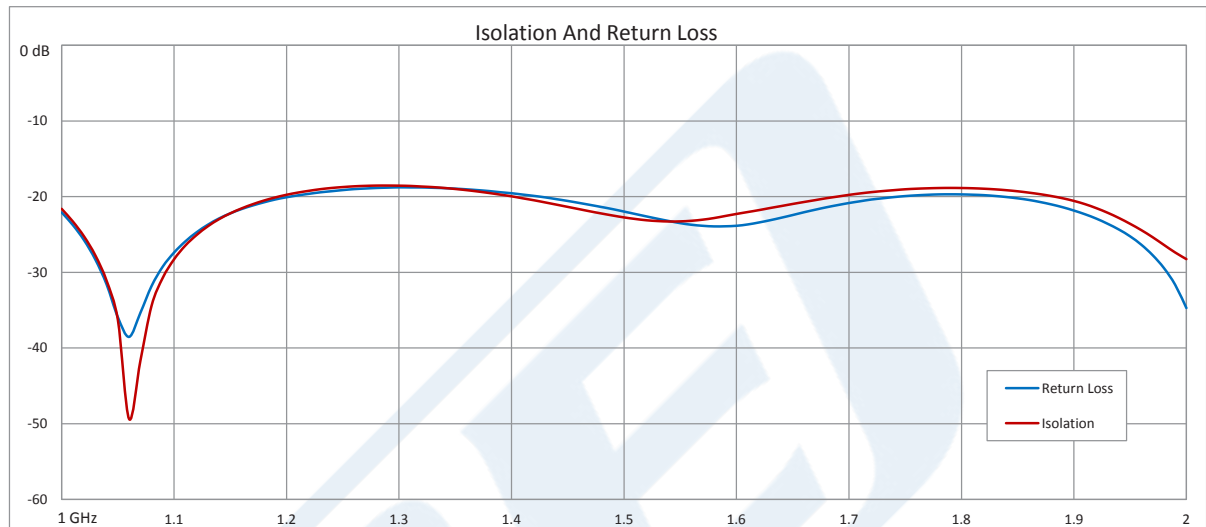




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High Power Isolator With 18 dB Isolation From 1 GHz to 2 GHz, 50 Watts And N Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

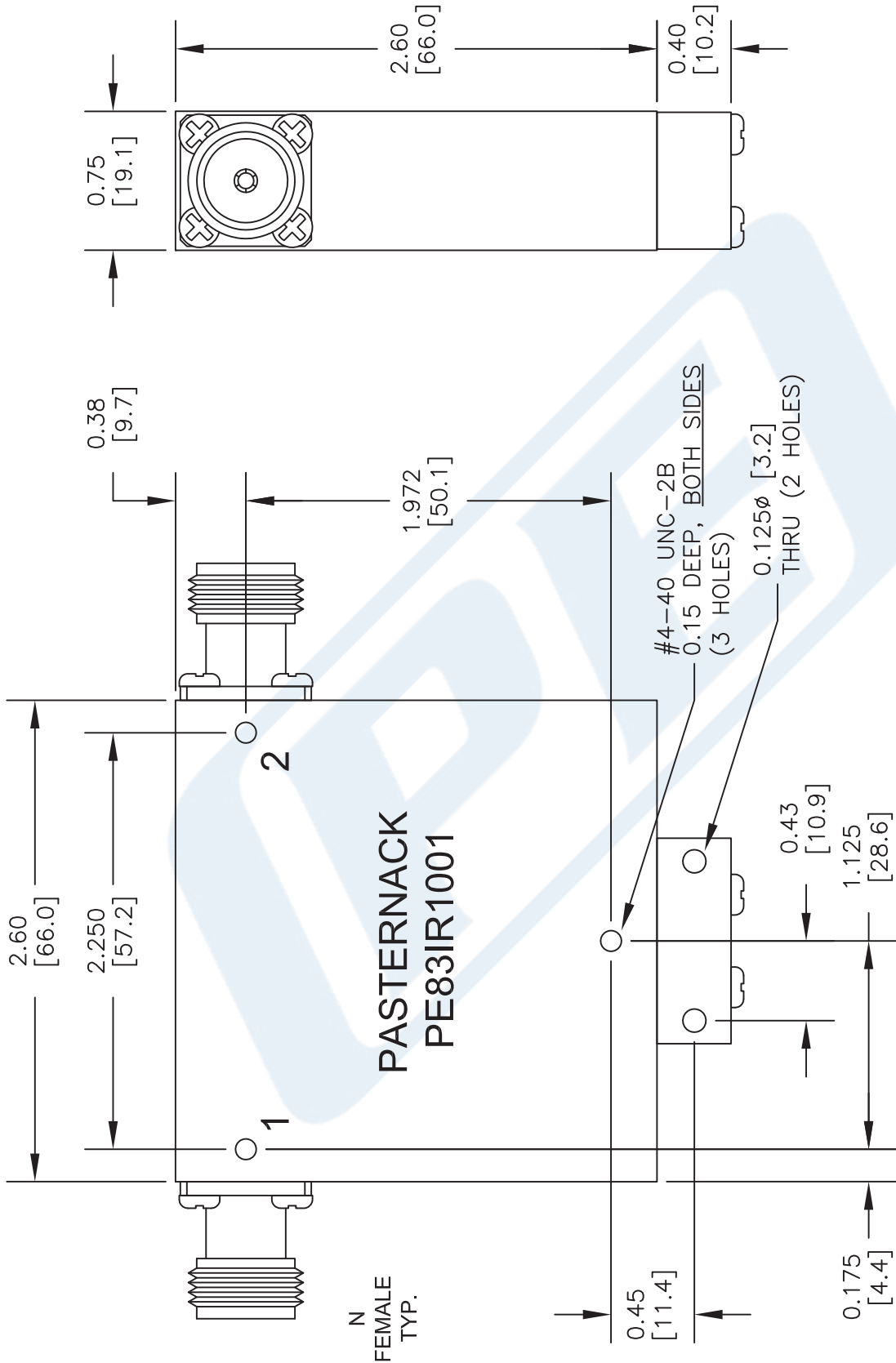
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PE83IR1001 CAD Drawing

High Power Isolator With 18 dB Isolation From 1 GHz to 2 GHz, 50 Watts And N Female



DWG TITLE

**PE83IR1001**

- 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].

FSCM NO. 53919

CAD FILE 012516

SCALE N/A

SIZE A

2233



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