



## Dual Junction Isolator With 40 dB Isolation From 7 GHz to 12.4 GHz, 5 Watts And N Female

### TECHNICAL DATA SHEET

PE83IR1022

The PE83IR1022 is a dual junction isolator offering 40 dB minimum of isolation over a frequency band of 7 to 12.4 GHz. This coaxial part uses type N female connectors on all ports and has a power rating of 5 watts in forward and 1 watts in reverse direction.

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.

- Dual Junction Isolator
- Frequency Range of 7 to 12.4 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	SMA Female
Frequency Range	7 GHz to 12.4 GHz
Design	Dual Junction
Layout	Connectorized

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	7		12.4	GHz
Impedance		50		Ohms
Insertion Loss			1.2	dB
Forward Power			5	Watts
Reverse Power			1	Watts
Input VSWR			1.25:1	
Isolation	40			dB

#### Mechanical Specifications

##### Temperature

Operating Range 0 to 50 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Dual Junction Isolator With 40 dB Isolation From 7 GHz to 12.4 GHz, 5 Watts And N Female PE83IR1022](#)



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**Size**

Length	1.7 in [43.18 mm]
Width	0.75 in [19.05 mm]
Height	1.17 in [29.72 mm]
Weight	0.211 lbs [95.71 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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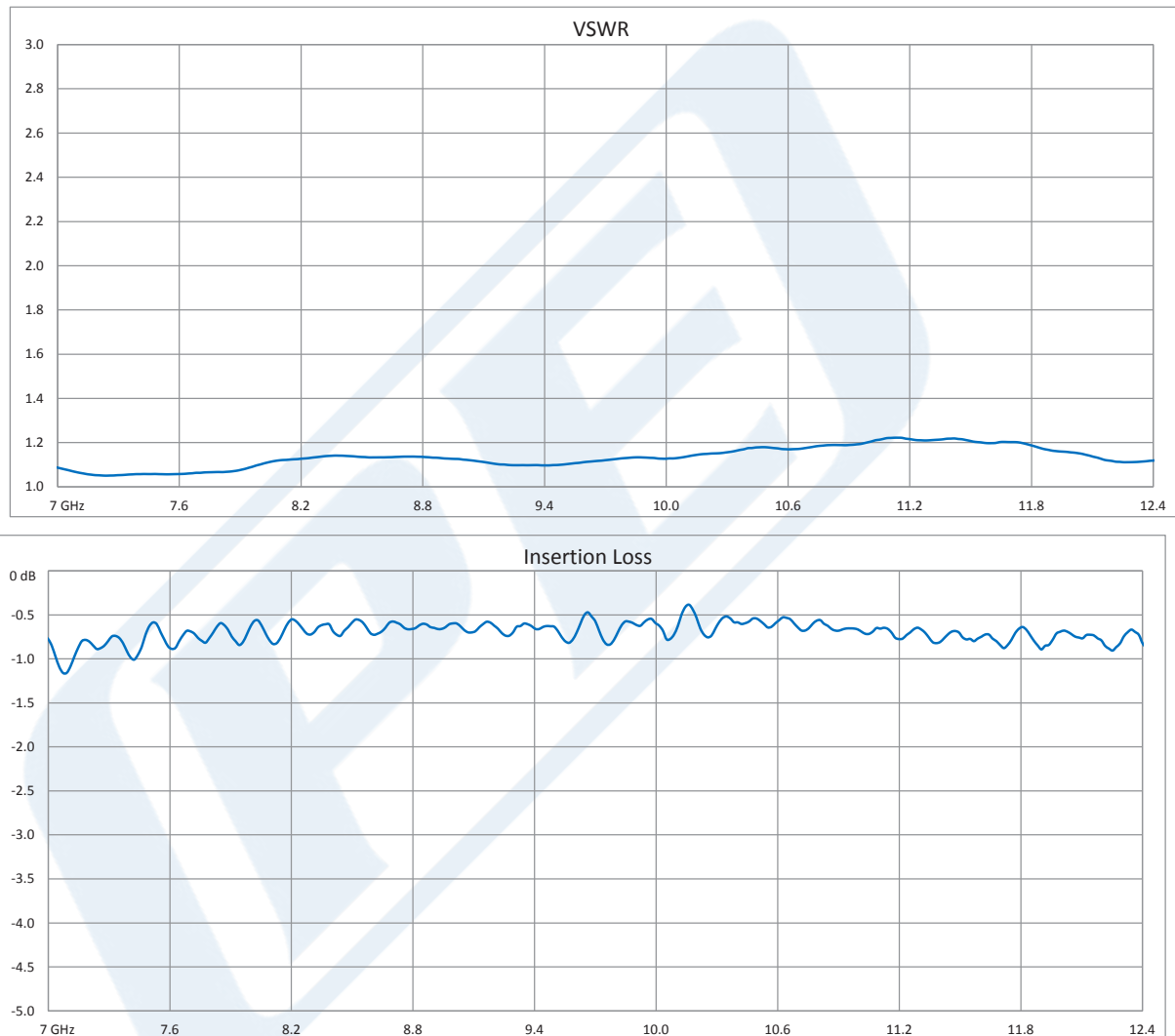


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PE831R1022

Typical Performance Data



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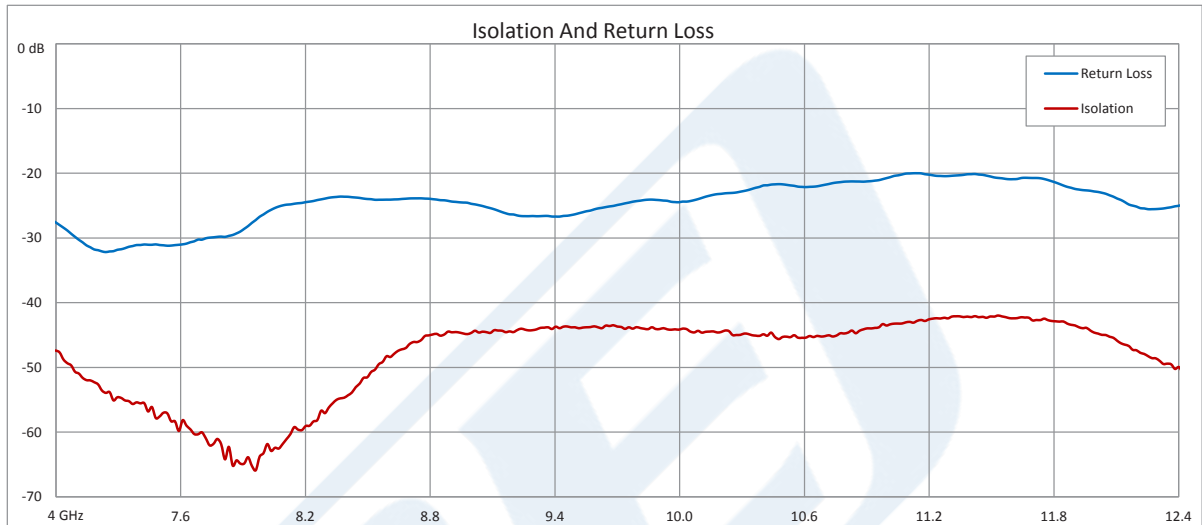




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Dual Junction Isolator With 40 dB Isolation From 7 GHz to 12.4 GHz, 5 Watts And N Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

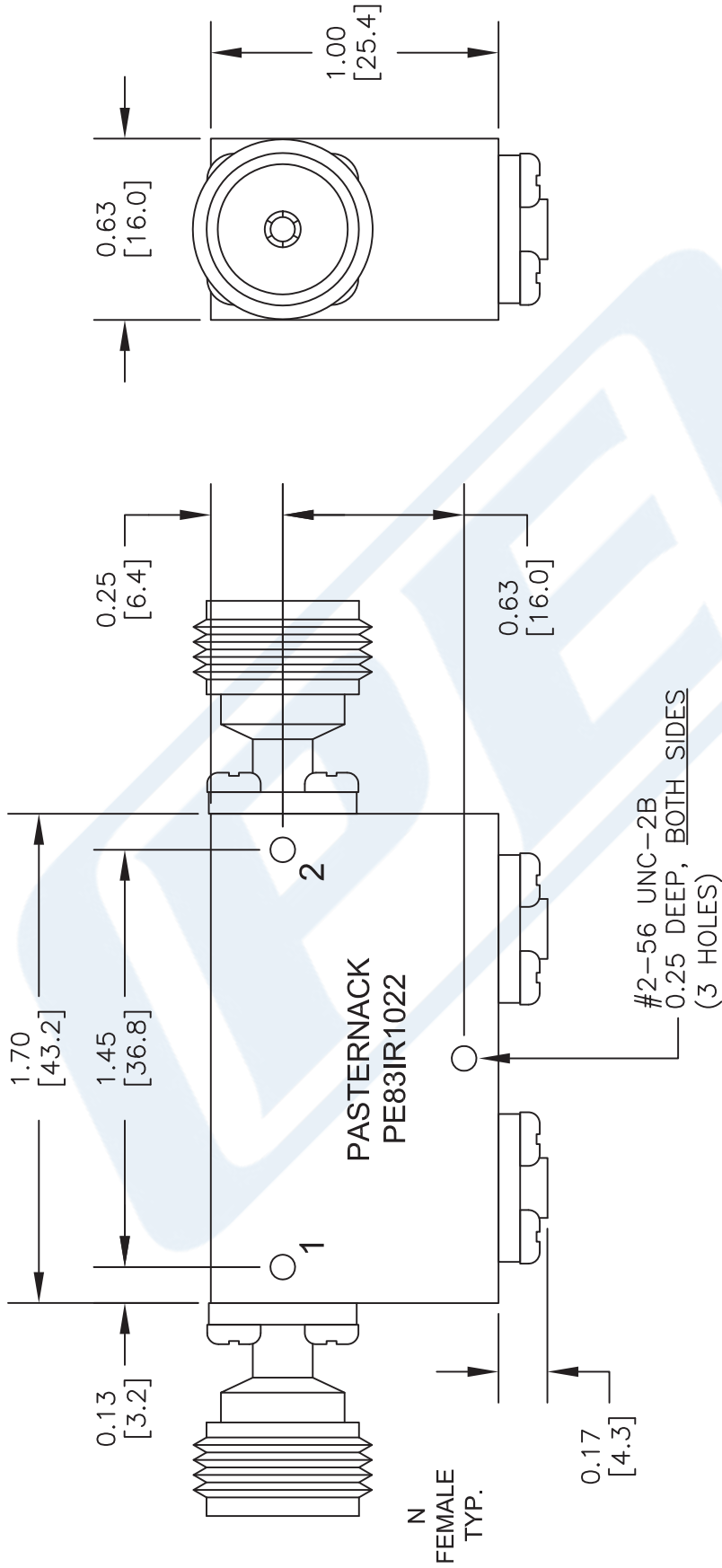
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Dual Junction Isolator With 40 dB Isolation From 7 GHz to 12.4 GHz, 5 Watts And N Female PE83IR1022](http://www.pasternack.com/dual-junction-isolator-40db-isolation-12.4-ghz-5-watts-n-female-pe83ir1022-p.aspx)

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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.

# PE83IR1022 CAD Drawing

Dual Junction Isolator With 40 dB Isolation From 7 GHz to 12.4 GHz, 5 Watts And N Female



DWG TITLE

**PE83IR1022**

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 032316

SCALE N/A

SIZE A

2233



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