# **PASTERNACK**<sup>®</sup> THE ENGINEER'S RF SOURCE

## Dual Junction Isolator With 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female

## **TECHNICAL DATA SHEET**

The PE83IR1020 is a dual junction isolator offering 36 dB minimum of isolation over a frequency band of 4 to 8 GHz. This coaxial part uses type N female connectors on all ports and has a power rating of 10 watts in forward and 2 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.

Telecom Infrastructure

R&D Labs

Communication Systems

- Dual Junction Isolator
- Frequency Range of 4 to 8 GHz
- Female N Connectors
- Low VSWR

#### Applications

- Radar Systems
- Military
- · Wireless Radio Systems

#### Configuration

Connector 1 Connector 2 **Frequency Range** Design Layout

N Female **SMA Female** 4 GHz to 8 GHz **Dual Junction** Connectorized

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	4		8	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Forward Power			10	Watts
Reverse Power			2	Watts
Input VSWR			1.3:1	
Isolation	36			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 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female PE83IR1020

PE83IR1020 REV 1.0

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

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Microwave Radio Systems

**PE83IR1020** 





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Size2 in [50.8 mm]Length0.63 in [16 mm]Width0.63 in [16 mm]Height1.25 in [31.75 mm]Weight0.23 lbs [104.33 g]Compliance Certifications (visit www.Pasternack.com for current document)RoHS Compliant12/17/2015

#### **Plotted and Other Data**

Notes:

• Values at 25 °C, sea level

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#### PE83IR1020

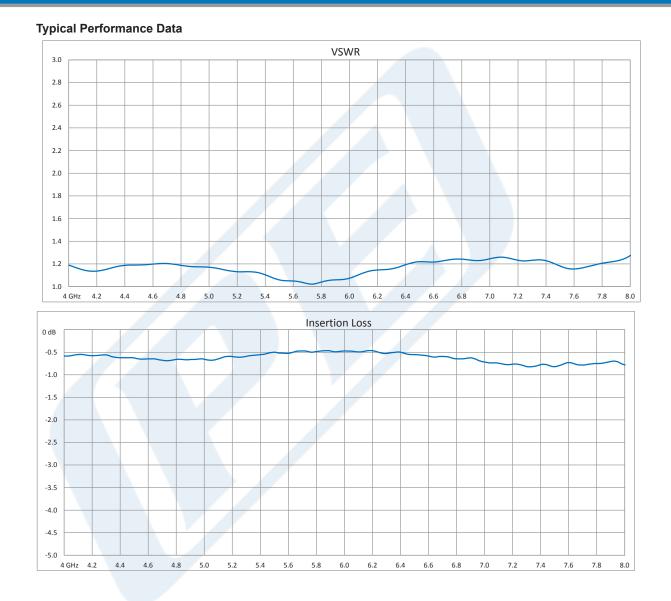




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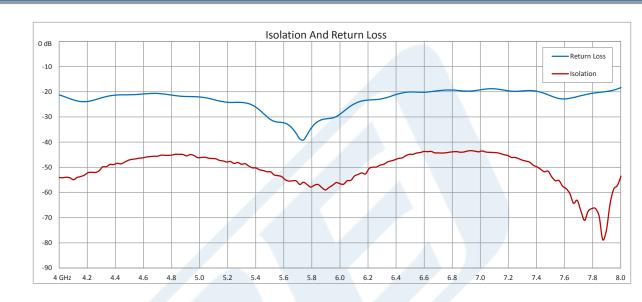




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Dual Junction Isolator With 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/dual-junction-isolator-36db-isolation-8-ghz-10-watts-n-female-pe83ir1020-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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## PE83IR1020 CAD Drawing

Dual Junction Isolator With 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female

