



### Isolators Technical Data Sheet

PE83IR1020

### **Features**

- Dual Junction Isolator
- Frequency Range of 4 to 8 GHz

- · Female N Connectors
- Low VSWR

### **Applications**

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

### Microwave Radio Systems

### **Description**

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.

#### **Electrical Specifications**

| Description       | Minimum | Typical | Maximum | Units |
|-------------------|---------|---------|---------|-------|
| Frequency Range   | 4       |         | 8       | GHz   |
| Impedance         |         | 50      |         | Ohms  |
| Insertion Loss    |         |         | 1       | dB    |
| Isolation         | 36      |         |         | dB    |
| VSWR              |         |         | 1.3:1   |       |
| Forward Power, CW |         |         | 10      | Watts |
| Reverse Power, CW |         |         | 2       | Watts |
|                   |         |         |         |       |

**Electrical Specification Notes:** 

Electrical Performance Is Guaranteed Only At 25C Ambient

### **Mechanical Specifications**

Size

 Length
 2 in [50.8 mm]

 Width
 0.63 in [16 mm]

 Height
 1.25 in [31.75 mm]

 Weight
 0.231 lbs [104.78 g]

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

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

Sales@Pasternack.com • Techsupport@Pasternack.com



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Configuration

Design Dual Junction
Package Style Connectorized
Connector 1 N Female
Connector 2 SMA Female

**Environmental Specifications** 

**Temperature** 

Operating Range 0 to +50 deg C

Compliance Certifications (see product page for current document)

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

Notes:

### **Typical Performance Data**



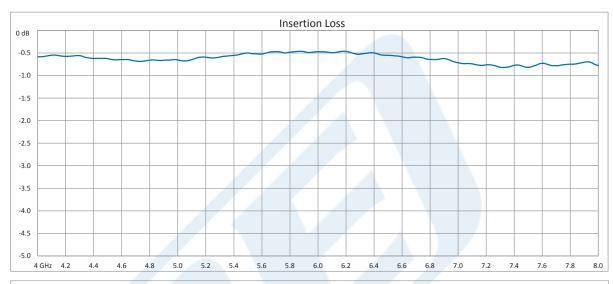
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Dual Junction Isolator With 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability 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 36 dB Isolation From 4 GHz to 8 GHz, 10 Watts And N Female PE83IR1020

URL: https://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

