



Isolator With 20 dB Isolation From 11 GHz to 18 GHz, 1 Watt And SMA Female

Isolators Technical Data Sheet

PE8305

Features

- 11 to 18 GHz Frequency Range
- Max Forward and Reverse Power 1 Watt CW
- Insertion Loss < 0.5 dB
- VSWR < 1.25:1
- Isolation > 20 dB
- SMA Female Connectors

Applications

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

Description

The PE8305 is a single junction isolator offering a forward and reverse power rating of 1 Watt CW over an operational frequency band of 11 to 18 GHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 20 dB isolation.

Pasternack 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 | 11 | | 18 | GHz |
| Impedance | | 50 | | Ohms |
| Insertion Loss | | | 0.5 | dB |
| Isolation | 20 | | | dB |
| VSWR | | | 1.25:1 | |
| Forward Power, CW | | | 1 | Watts |
| Reverse Power, CW | | | 1 | Watts |

Electrical Specification Notes:
 Values at 25°C, sea level.

Mechanical Specifications

| Size | |
|--------|---------------------|
| Length | 0.5 in [12.7 mm] |
| Width | 0.57 in [14.48 mm] |
| Height | 0.39 in [9.91 mm] |
| Weight | 0.034 lbs [15.42 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Isolator With 20 dB Isolation From 11 GHz to 18 GHz, 1 Watt And SMA Female PE8305](#)



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Configuration

| | |
|---------------|-----------------|
| Design | Single Junction |
| Package Style | Connectorized |
| Connector 1 | SMA Female |
| Connector 2 | SMA Female |

Environmental Specifications

Temperature

| | |
|-----------------|------------------|
| Operating Range | -20 to +65 deg C |
|-----------------|------------------|

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

Plotted and Other Data

Notes:

Isolator With 20 dB Isolation From 11 GHz to 18 GHz, 1 Watt And SMA 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.

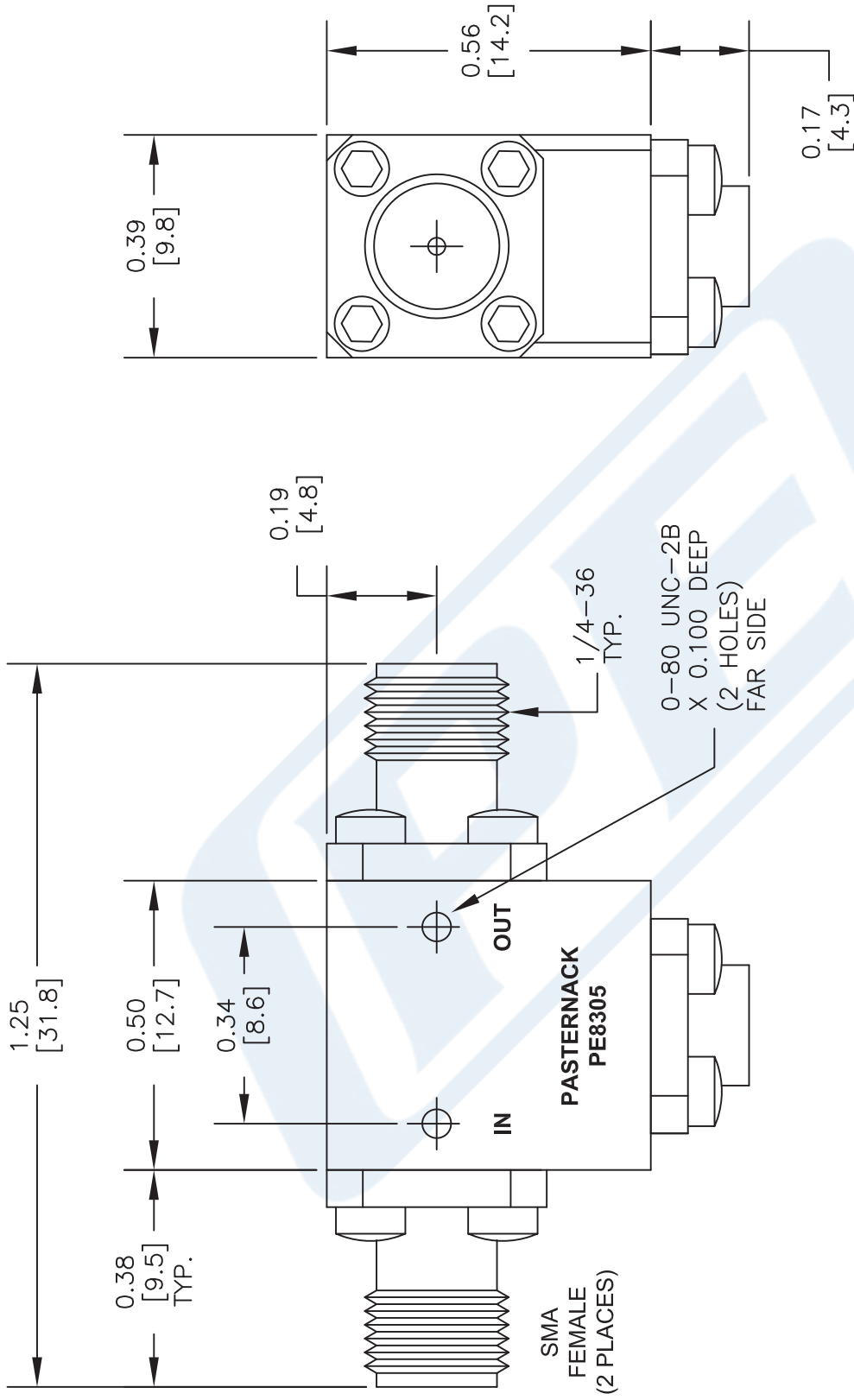
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URL: <https://www.pasternack.com/50-ohm-sma-isolator-11000-mhz-18000-mhz-20-watts-20-db-pe8305-p.aspx>

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.

PE8305 CAD Drawing

Isolator With 20 dB Isolation From 11 GHz to 18 GHz, 1 Watt And SMA Female



| STANDARD TOLERANCES | |
|---------------------|-------|
| .X | ±0.2 |
| .XX | ±0.1 |
| .XXX | ±0.05 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| | | | |
|--|--|------------------------------------|---|
| <p>PE PASTERNAK THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com</p> | | <p>DWG TITLE PE8305</p> | <p>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].</p> |
| <p>FSCM NO. 53919</p> | | <p>CAD FILE 072716</p> | <p>SCALE N/A</p> |
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