



## Isolator With 17 dB Isolation From 3.5 GHz to 12.8 GHz, 2 Watts And SMA Female

### Isolators Technical Data Sheet

PE8314

#### Features

- 3.5 to 12.8 GHz Frequency Range
- Max Forward and Reverse Power 2 Watts CW
- Insertion Loss < 2.2 dB
- VSWR < 1.5:1
- Isolation > 17 dB
- SMA Female Connectors

#### Applications

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

#### Description

The PE8314 is a single junction isolator offering a forward and reverse power rating of 2 Watts CW over an operational frequency band of 3.5 to 12.8 GHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 17 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	3.5		12.8	GHz
Impedance		50		Ohms
Insertion Loss			2.2	dB
Isolation	17			dB
VSWR			1.5:1	
Forward Power, CW			2	Watts
Reverse Power, CW			2	Watts

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

#### Mechanical Specifications

Size	
Length	2 in [50.8 mm]
Width	1.2 in [30.48 mm]
Height	0.53 in [13.46 mm]
Weight	0.2 lbs [90.72 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 17 dB Isolation From 3.5 GHz to 12.8 GHz, 2 Watts And SMA Female PE8314](#)



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#### Configuration

Design	Single Junction
Direction	1 to 2
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

#### Environmental Specifications

##### Temperature

Operating Range	-55 to +65 deg C
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**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

Isolator With 17 dB Isolation From 3.5 GHz to 12.8 GHz, 2 Watts 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-3.5-12.8-ghz-2-watts-17-db-pe8314-p.aspx>

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