



## Absorptive SPST PIN Diode Switch Operating From 500 MHz to 18 GHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA

### PIN Diode Switches Technical Data Sheet

PE71S6209

#### Features

- SPST Absorptive Switch
- 0.5 GHz to 18.0 GHz
- Insertion Loss 3.5 dB max
- Isolation 55 dB min
- Power Input 20 dBm CW max
- Switching Speed 100 nsec max

#### Applications

- Test & Measurement
- Military Communication
- Commercial Communication

#### Description

The PE71S6209 is a SPST Absorptive Switch designed to operate over the 0.5 GHz to 18.0 GHz Frequency Range. The switch is designed to maintain low insertion loss, high isolation, and fast switching speed.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		18	GHz
Impedance		50		Ohms
VSWR			2:1	
Insertion Loss			3.5	dB
Isolation	55			dB
Switching Time			100	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watt
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-15	50	Vdc
Current @ 5 Vdc		50		mA
Current @ -15Vdc		50		mA
Operating Temperature	-40		+85	deg C

#### Mechanical Specifications

<b>Size</b>	
Length	1.2 in [30.48 mm]
Width	0.9 in [22.86 mm]
Height	0.35 in [8.89 mm]
Weight	0.051 lbs [23.13 g]
Design	Absorptive, SPST
RF Connector	SMA Female
RF Connector Option	Field Replaceable
TTL Control Connector	Solder Pin

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPST PIN Diode Switch Operating From 500 MHz to 18 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6209](#)



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### Environmental Specifications

#### Temperature

Operating Range

-40 to +85 deg C

Storage Range

-55 to +125 deg C

Humidity

MIL-STD-202F, METHOD 103B COND. B

Shock

MIL-STD-202F, METHOD 213B COND. B

Vibration

MIL-STD-202F, METHOD 204D COND. B

Altitude

MIL-STD-202F, METHOD 105C COND. B

Temperature Cycling

MIL-STD-202F, METHOD 107D COND. A

ESD Sensitivity

ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPST PIN Diode Switch Operating From 500 MHz to 18 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6209](#)

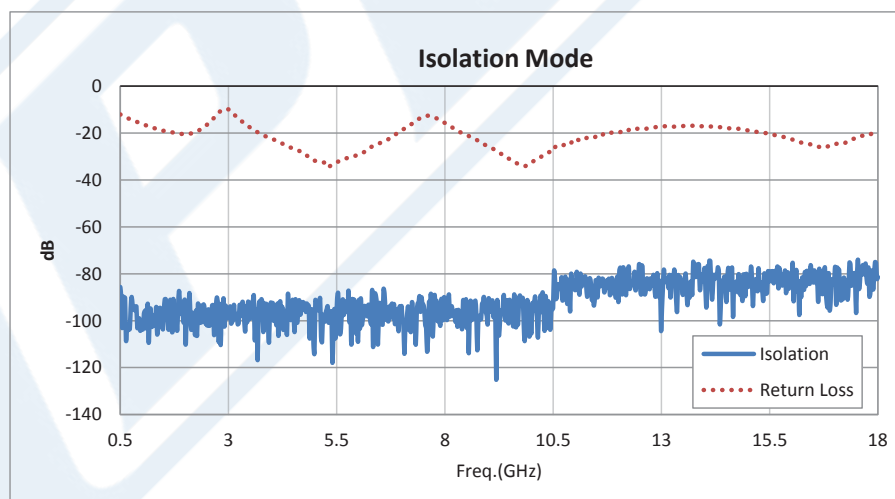
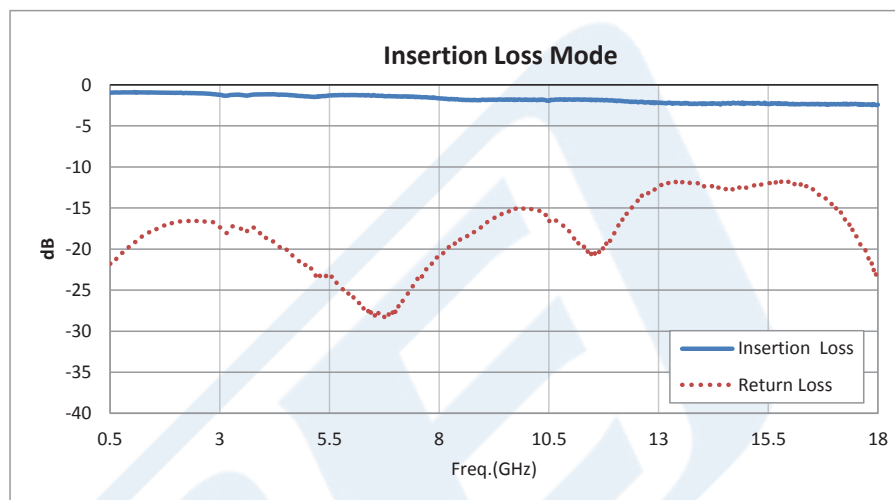


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### Typical Performance Data



Absorptive SPST PIN Diode Switch Operating From 500 MHz to 18 GHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA 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.

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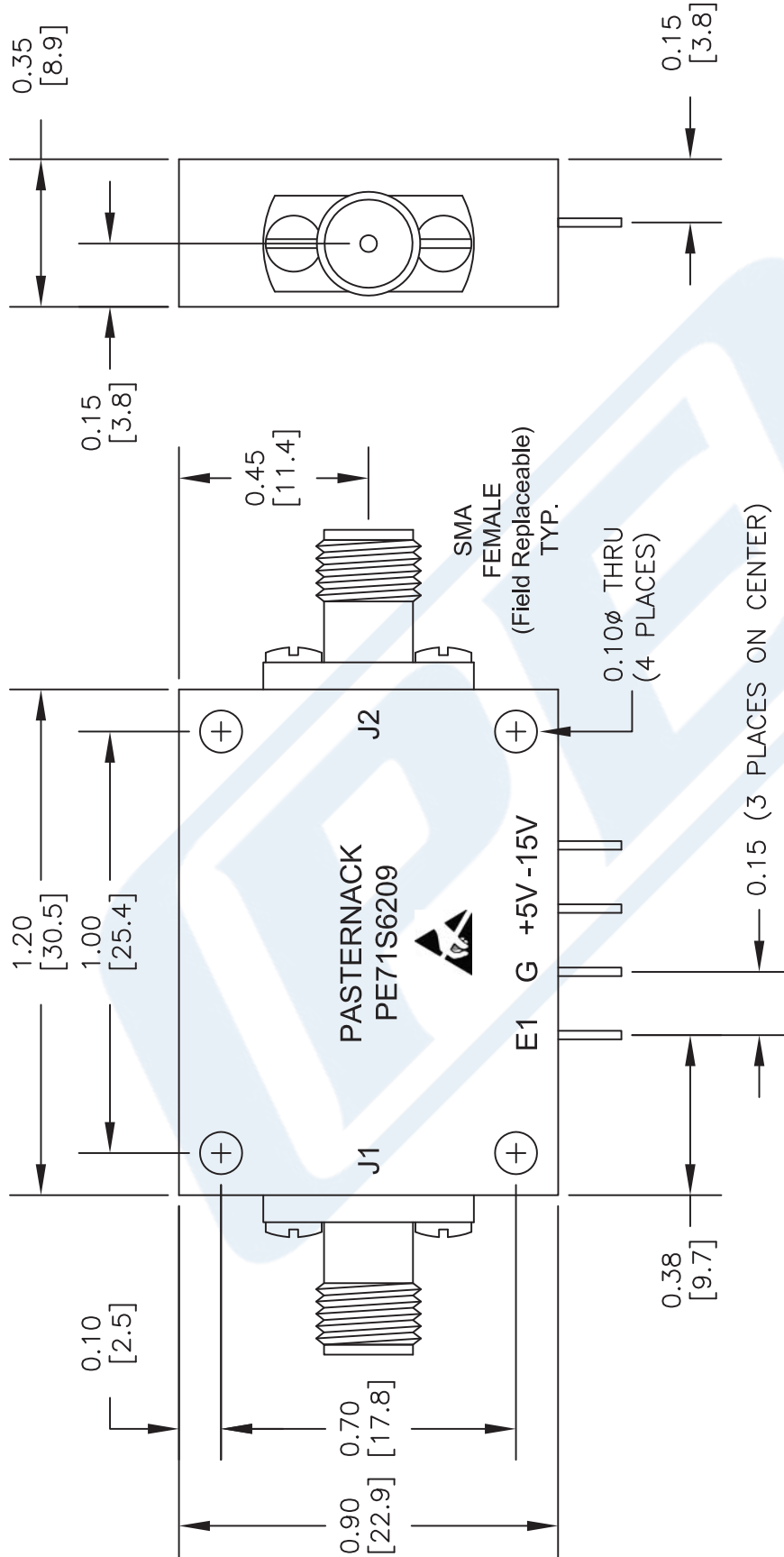
PE71S6209

URL: <https://www.pasternack.com/absorptive-spst-pin-diode-switch-18-ghz-20-dbm-sma-pe71s6209-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.

# PE71S6209 CAD Drawing

Absorptive SPST PIN Diode Switch Operating From 500 MHz to 18 GHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA



1 BIT TTL LOGIC TABLE	
E2	FUNCTION
0	LOW LOSS
1	ISOLATION

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].

DWG TITLE  
**PE71S6209**

**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

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SIZE A

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