



Absorptive SPDT PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +20 dBm and Field Replaceable SMA

## PIN Diode Switches Technical Data Sheet

PE71S6210

### Features

- SPDT Absorptive Switch
- 0.5 GHz to 18.0 GHz
- Insertion Loss 3.75 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 PE71S6210 is a SPDT 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			3.75	dB
Isolation	55			dB
Switching Time			100	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-15		V
Current @ 5 V		80		mA
Current @ -15 V		50		mA
Operating Temperature	-40		+85	deg C

### Mechanical Specifications

#### Size

Length	1.2 in [30.48 mm]
Width	0.9 in [22.86 mm]
Height	0.35 in [8.89 mm]
Weight	0.05 lbs [22.68 g]
Design	Absorptive, SPDT
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 SPDT PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +20 dBm and Field Replaceable SMA PE71S6210](#)



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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 (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

Not RoHS Compliant

REACH Compliant

12/17/2015

### Plotted and Other Data

Notes:

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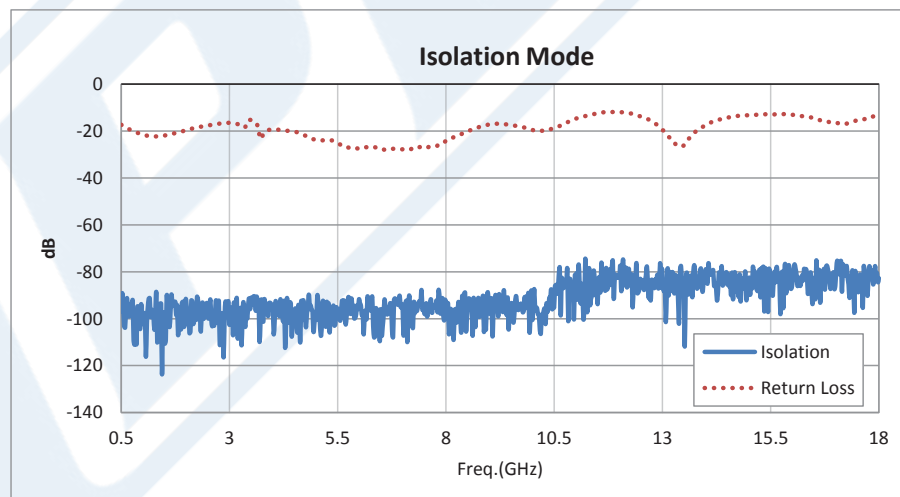
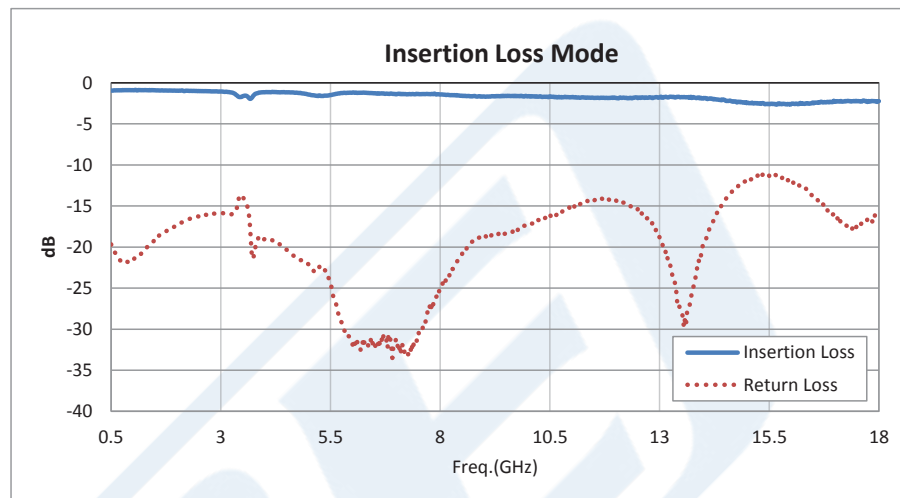


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### Typical Performance Data



Absorptive SPDT PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +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% availability and are part of the broadest selection in the industry.

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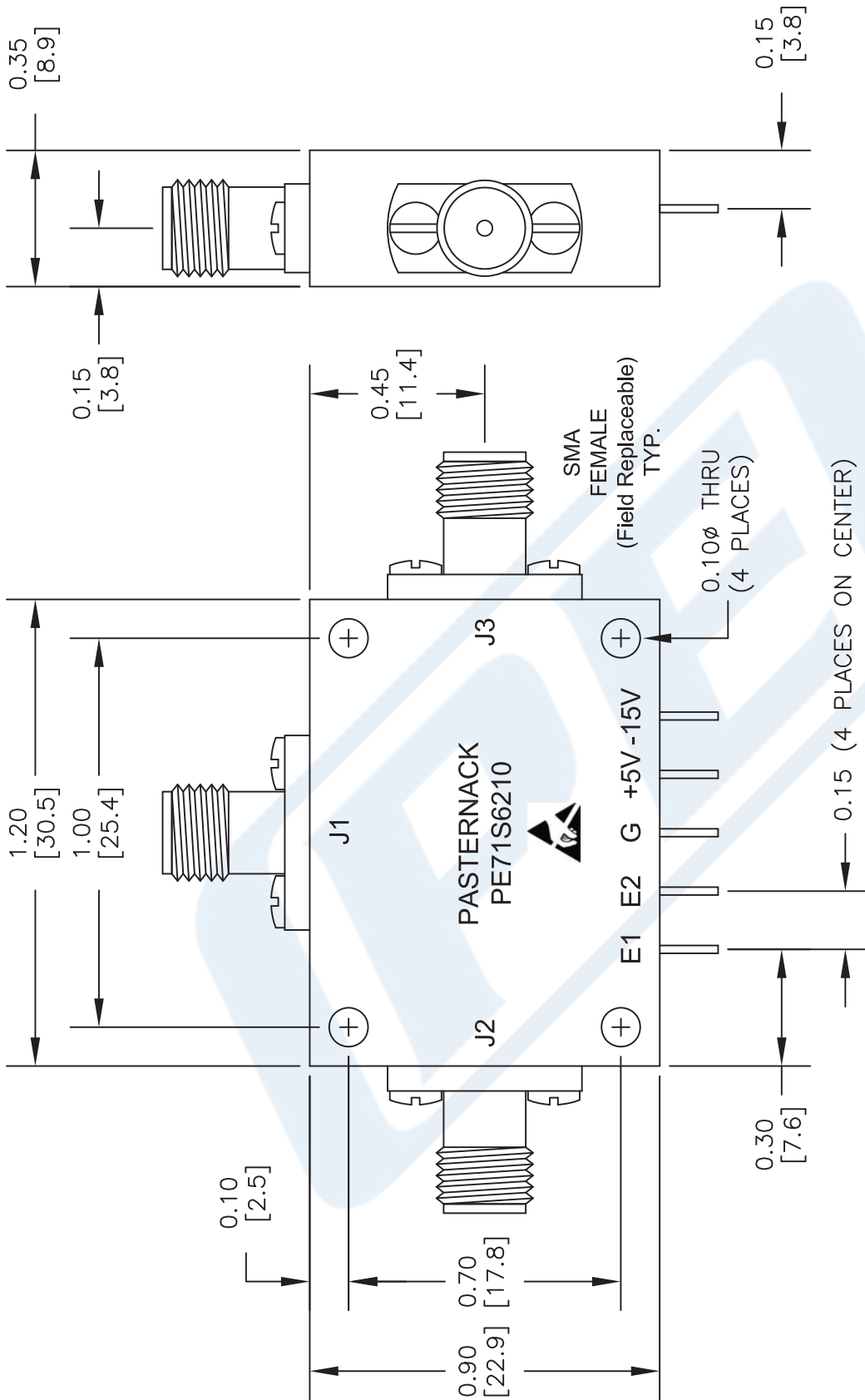
PE71S6210

URL: <http://www.pasternack.com/absorptive-spd-pin-diode-switch-18-ghz-20-dbm-sma-pe71s6210-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.

# PE71S6210 CAD Drawing

Absorptive SPDT PIN Diode Switch Operating From 500 MHz to  
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ALL DIMENSIONS ARE IN INCHES.  
TOLERANCES:  
X.XX ±0.010  
X.XXX ±0.005

\* THESE DIMENSIONS AND TOLERANCES  
SUPERSEDE NOTE #1 ON TITLE BLOCK.

2 BIT TTL LOGIC TABLE		
E1	E2	FUNCTION
0	1	J1-J2 LOW LOSS
1	0	J1-J3 LOW LOSS

DWG TITLE

**PE71S6210**

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****E** **PASTERNAK**<sup>®</sup>  
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](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233