



Absorptive SPST PIN Diode Switch Operating From 10 MHz  
to 1,000 MHz Up to +20 dBm and Field Replaceable SMA

## PIN Diode Switches Technical Data Sheet

PE71S6230

### Features

- SPST Absorptive Switch
- 0.01 GHz to 1.0 GHz
- Insertion Loss 1.3 dB max
- Isolation 80 dB typ
- Power Input 20 dBm CW max
- Field Replaceable Connectors

### Applications

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

### Description

The PE71S6230 is a Single Pole Single Throw (SPST) Absorptive PIN Diode Switch that operates from 1 GHz to 2 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Outstanding typical performance includes 1.3 dB insertion loss, 1.5:1 VSWR, > 80 dB isolation, and < 200 nsec switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -55°C to +85°C and dual voltage controls of +5 Vdc and -15 Vdc are required. The rugged package is designed to meet a series of MIL-STD-202F environmental conditions including humidity, shock, vibration, and temperature cycle. Package interfaces include solder terminals and female SMA connectors.

### Electrical Specifications

TTL Control

Off/Isolation: "1"

On/Low Loss: "0"

Description	Minimum	Typical	Maximum	Units
Frequency Range	10		1,000	MHz
Impedance		50		Ohms
VSWR		1.5:1		
Insertion Loss			1.3	dB
Isolation		80		dB
Switching Time			200	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-15		V
Current @ 5 V		20		mA
Current @ -15 V		40		mA
Operating Temperature	-55		+85	deg C

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 10 MHz to 1,000 MHz Up to +20 dBm and Field Replaceable SMA PE71S6230](#)



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### Mechanical Specifications

#### Size

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.5 in [12.7 mm]
Weight	0.06 lbs [27.22 g]
Finish	Blue Paint

#### Configuration

Design	Absorptive, SPST
RF Connector	SMA Female
RF Connector Option	Field Replaceable
TTL Control Connector	Solder Pin

### Environmental Specifications

#### Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

#### Humidity

MIL-STD-202F, Method 103B, Condition B

MIL-STD-202F, Method 213B, Condition B

MIL-STD-202F, Method 204D, Condition B

MIL-STD-202F, Method 105C, Condition B

MIL-STD-202F, Method 107D, Condition A

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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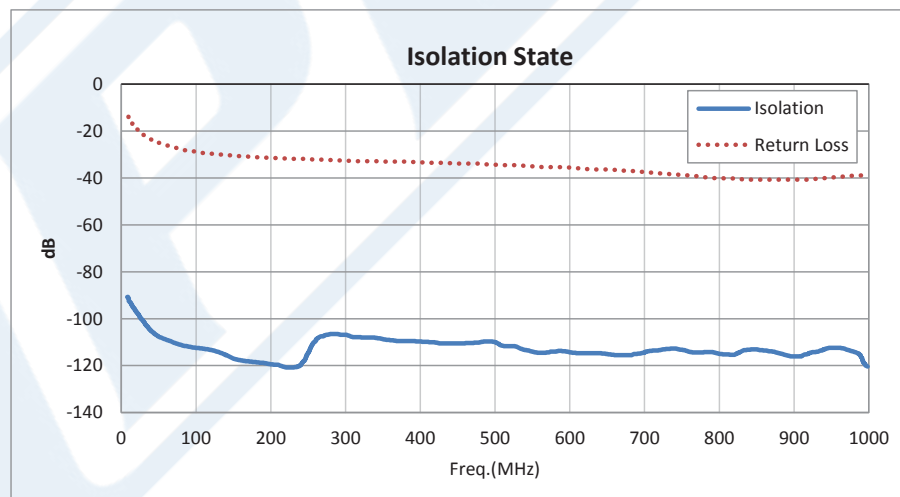
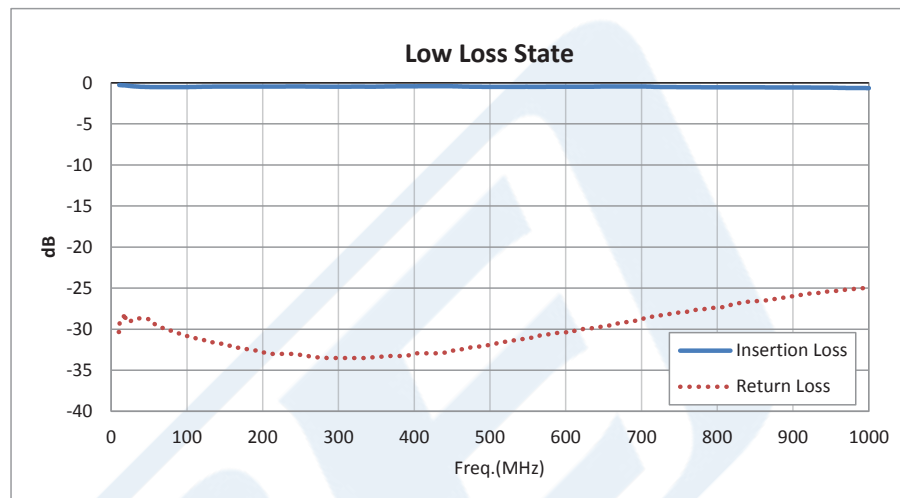


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### Typical Performance Data



Absorptive SPST PIN Diode Switch Operating From 10 MHz to 1,000 MHz 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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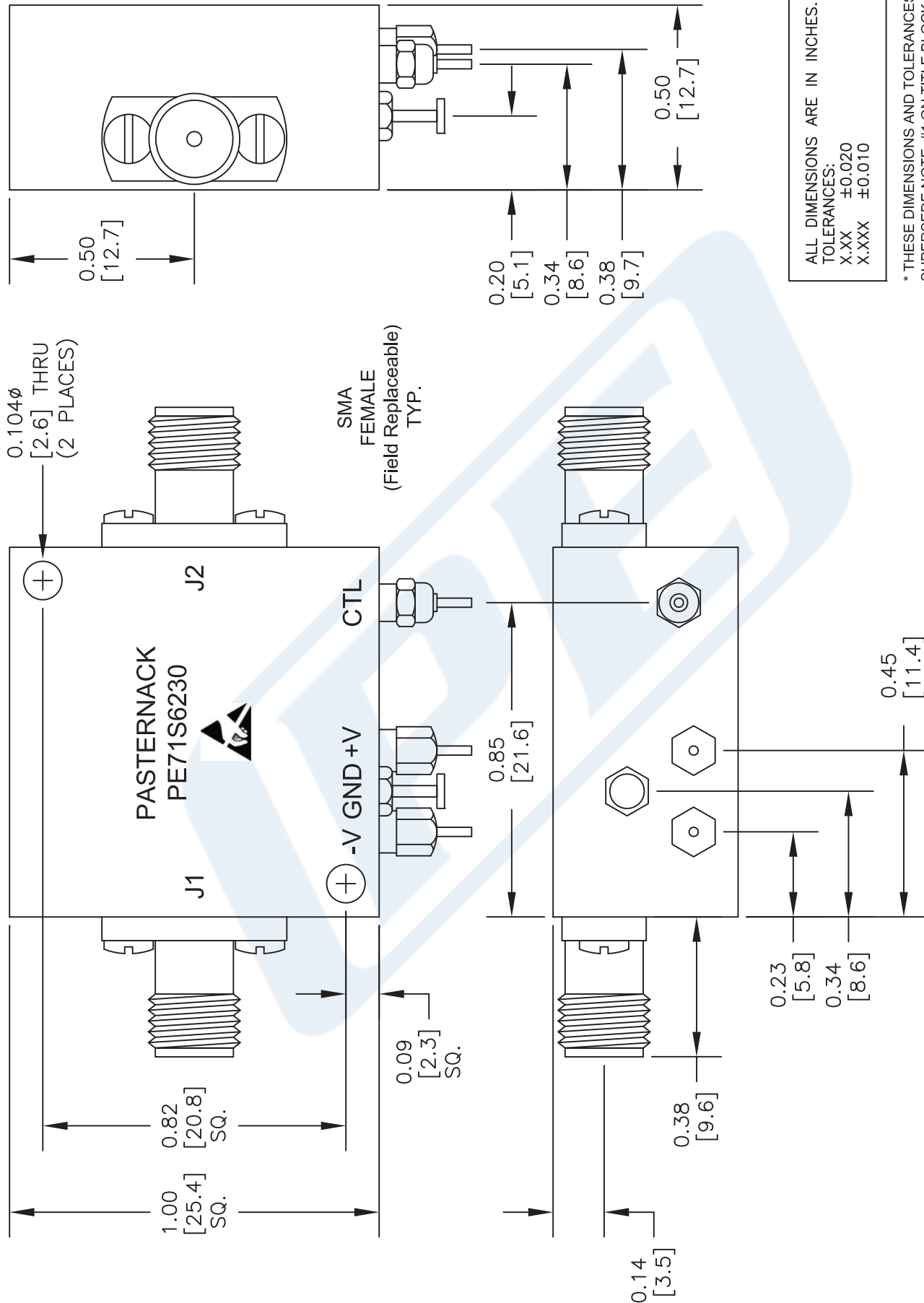
PE71S6230

URL: <http://www.pasternack.com/absorptive-spst-pin-diode-switch-1000-mhz-20-dbm-sma-pe71s6230-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.

# PE71S6230 CAD Drawing

Absorptive SPST PIN Diode Switch Operating From 10 MHz to 1,000 MHz Up to +20 dBm and Field Replaceable SMA



DWG TITLE

PE71S6230

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].

**PASTERNAK**  
THE ENGINEER'S RF SOURCE

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FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233