



Absorptive SPST PIN Diode Switch Operating From 1 GHz to 2 GHz Up to +20 dBm and Field Replaceable SMA

## PIN Diode Switches Technical Data Sheet

PE71S6231

### Features

- SPST Absorptive Switch
- 1.0 GHz to 2.0 GHz
- Insertion Loss 0.9 dB typ
- Isolation 80 dB min
- 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 PE71S6231 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 performance includes 0.9 dB typ insertion loss, 80 dB typ isolation, and 50 nsec max 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

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		2	GHz
Impedance		50		Ohms
Insertion Loss		0.9		dB
Isolation	80			dB
Switching Time			50	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 1 GHz to 2 GHz Up to +20 dBm and Field Replaceable SMA PE71S6231](#)



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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	0.05 lbs [22.68 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
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B
Temperature Cycling	MIL-STD-202F, Method 107D, Condition 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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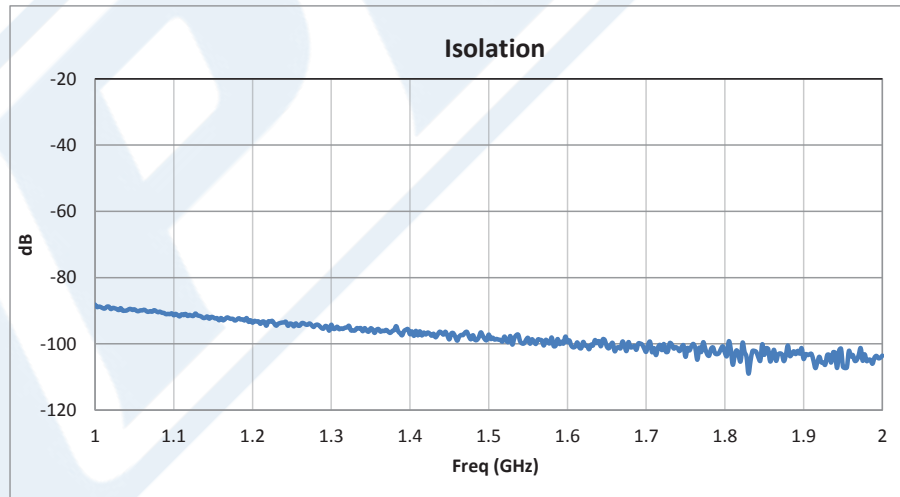
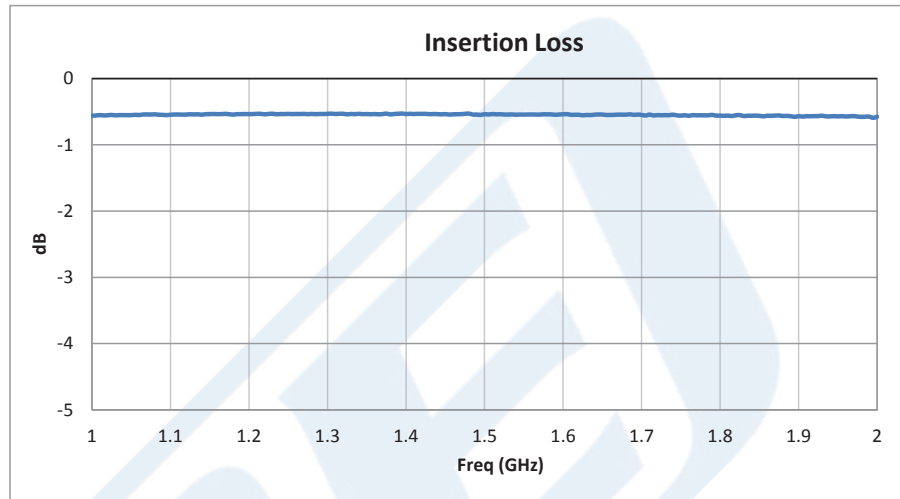


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Typical Performance Data



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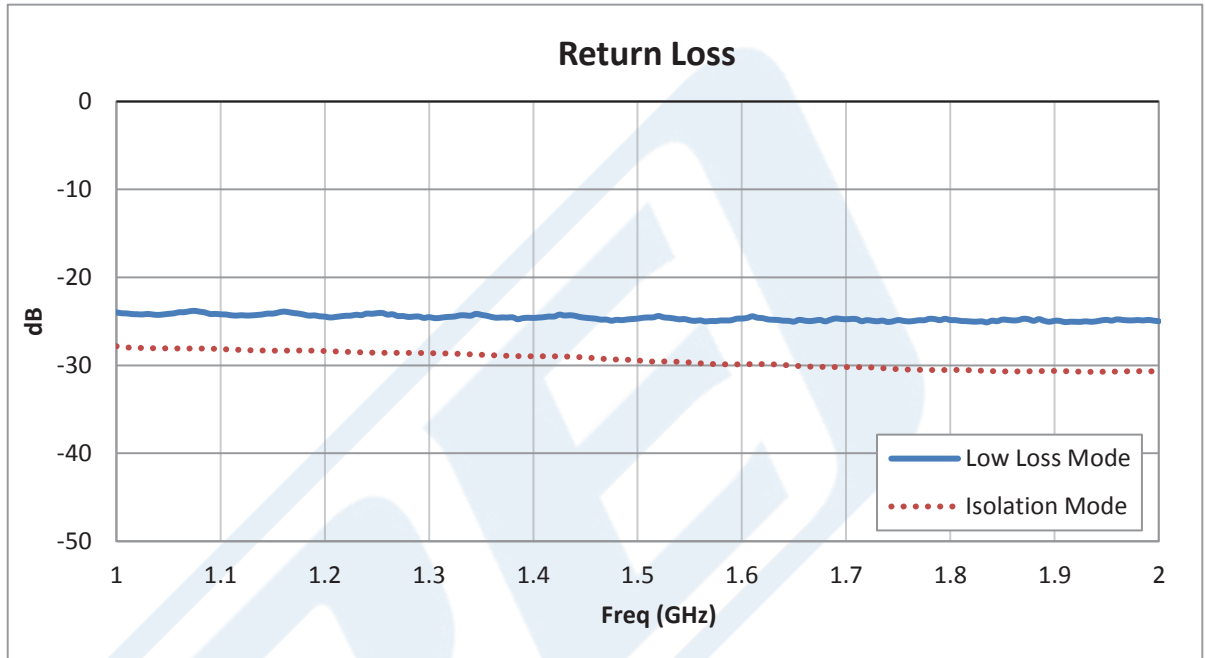




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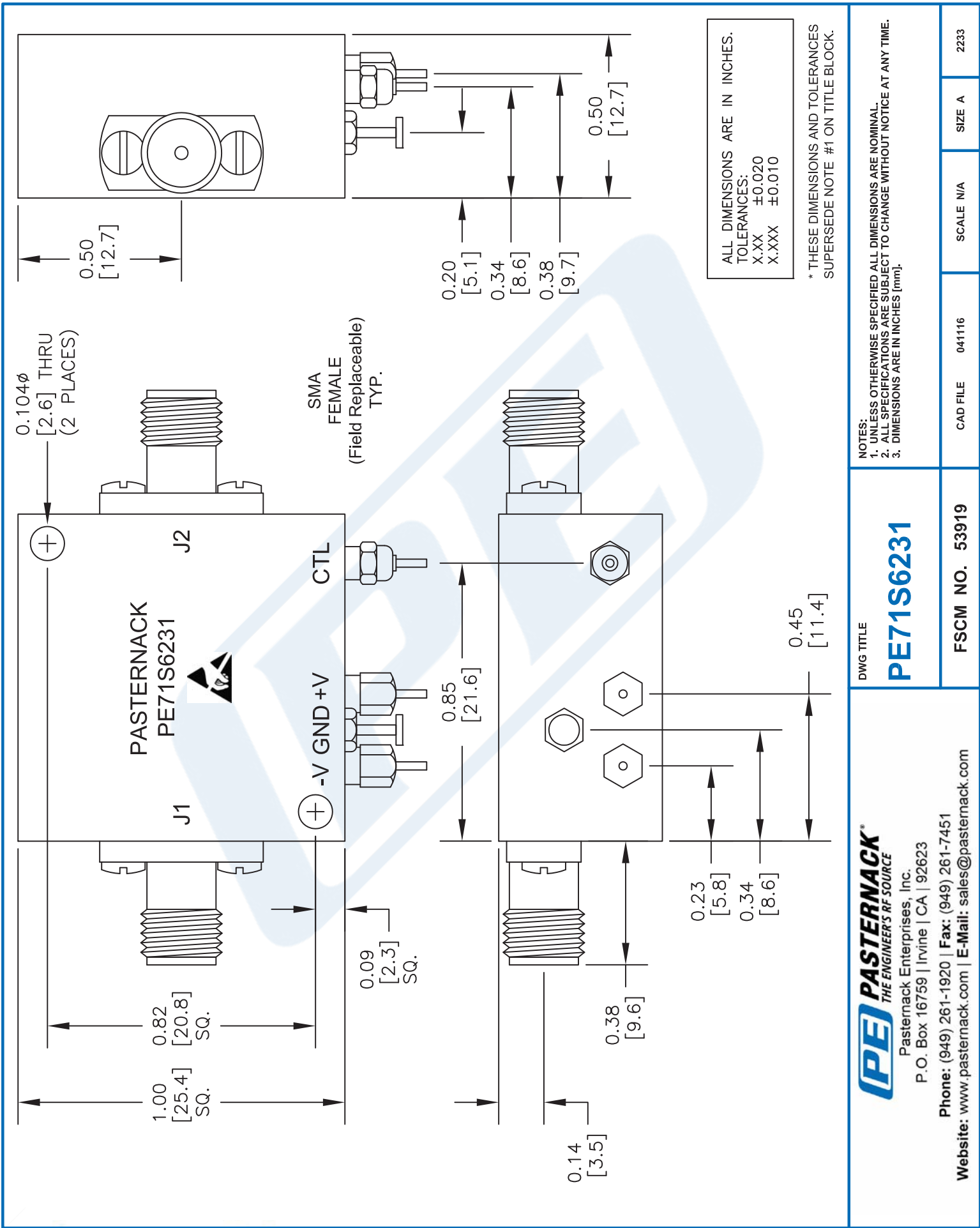
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# PE71S6231 CAD Drawing

Absorptive SPST PIN Diode Switch Operating From 1 GHz to 2 GHz Up to +20 dBm and Field Replaceable SMA



DWG TITLE

**PE71S6231**

FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233

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THE ENGINEER'S RF SOURCE

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