



Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6208

Features

- SPDT Absorptive Switch
- 2.0 GHz to 4.0 GHz
- Insertion Loss 1.2 dB max
- Isolation 75 dB min
- Power Input 1 W CW max
- Switching Speed 100 nsec max

Applications

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

Description

The PE71S2008 is a Single Pole Double Throw (SPDT) Absorptive PIN Diode Switch that operates from 2 to 4 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Electrical performance includes 1.2 dB max insertion loss, 75 dB min isolation, and 100 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 package interface uses solder terminals and SMA Female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		4	GHz
Impedance		50		Ohms
VSWR			1.6:1	
Insertion Loss			1.2	dB
Isolation	75			dB
Switching Time			100	ns
Input Power (CW)			0.5	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

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 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA PE71S6208](#)



Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6208

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	Pin

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 for current document)

Not RoHS Compliant

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 SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA PE71S6208](#)

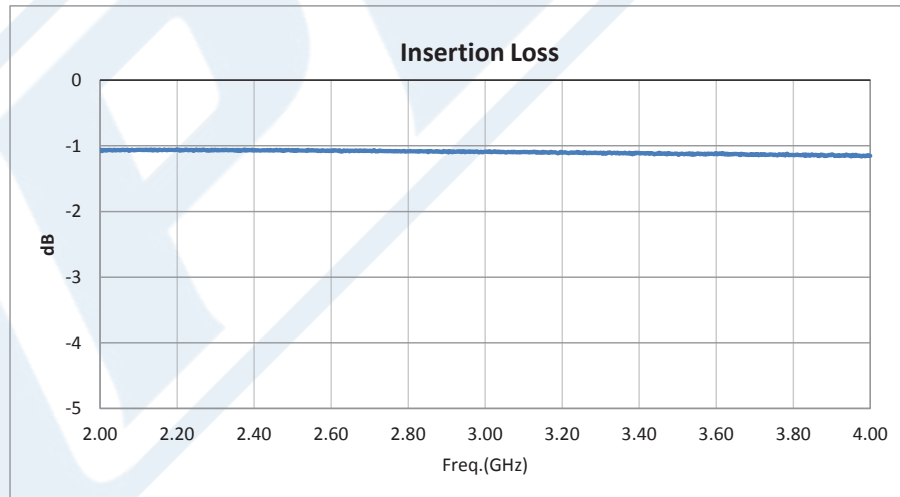
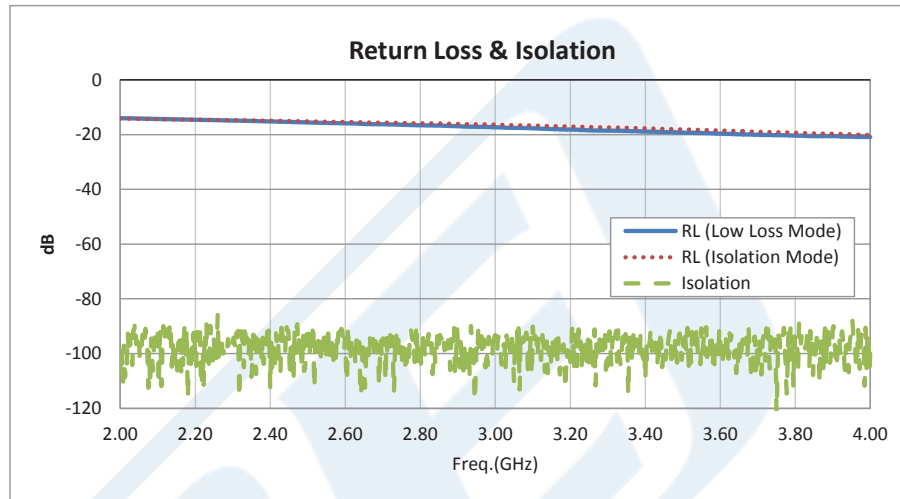


Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6208

Typical Performance Data



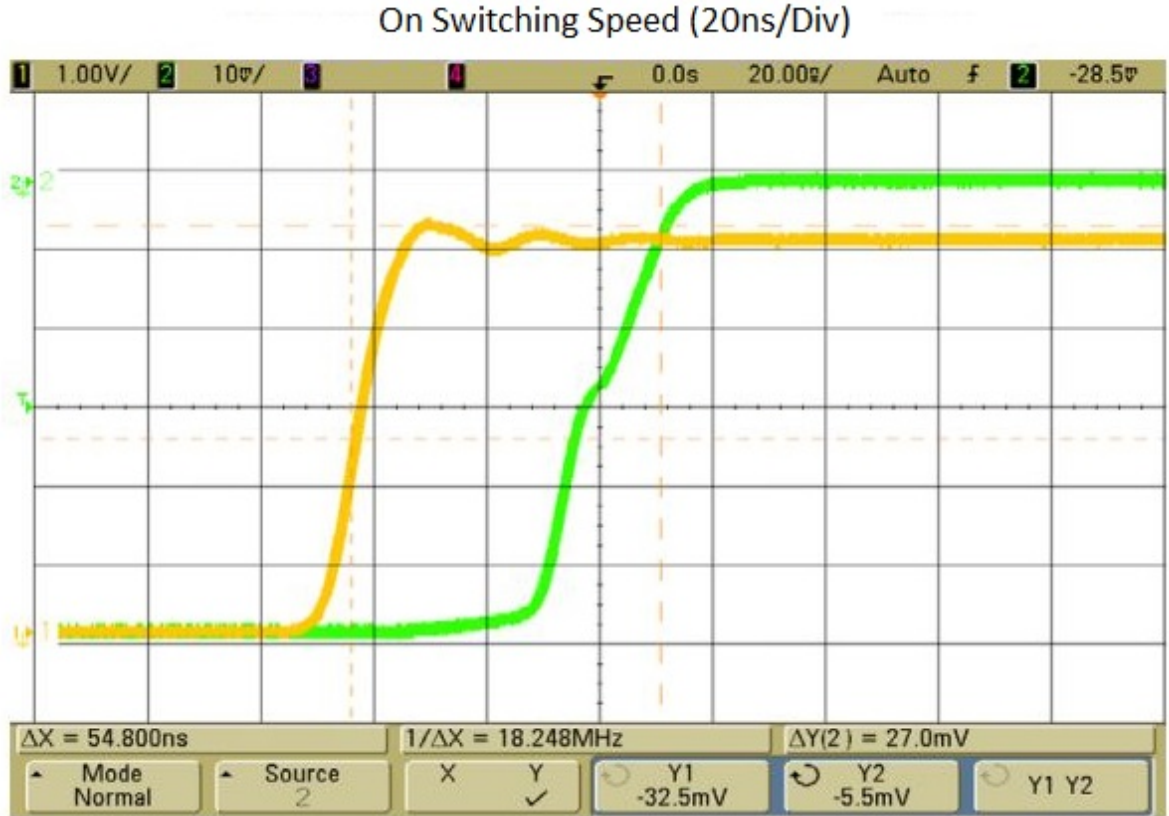
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA PE71S6208](#)



Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

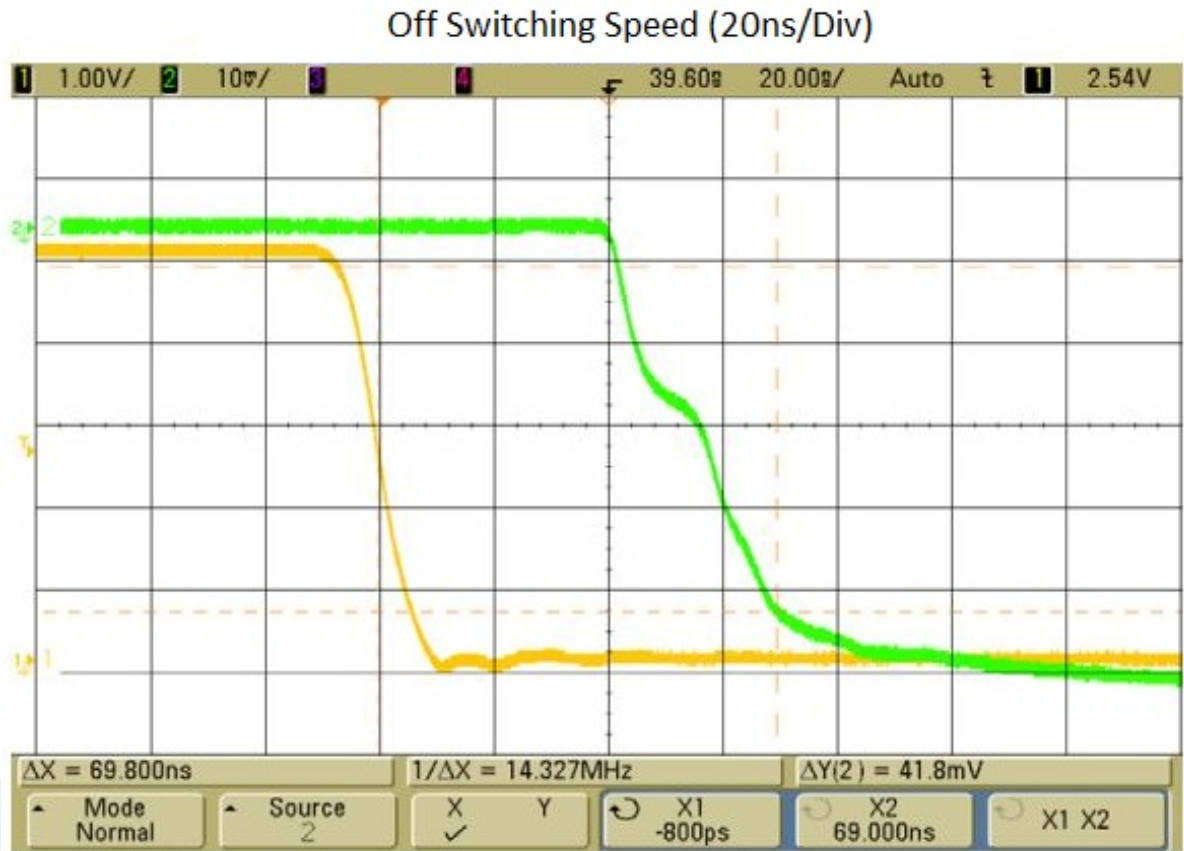
PE71S6208



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 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA PE71S6208](#)



Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA



Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 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.

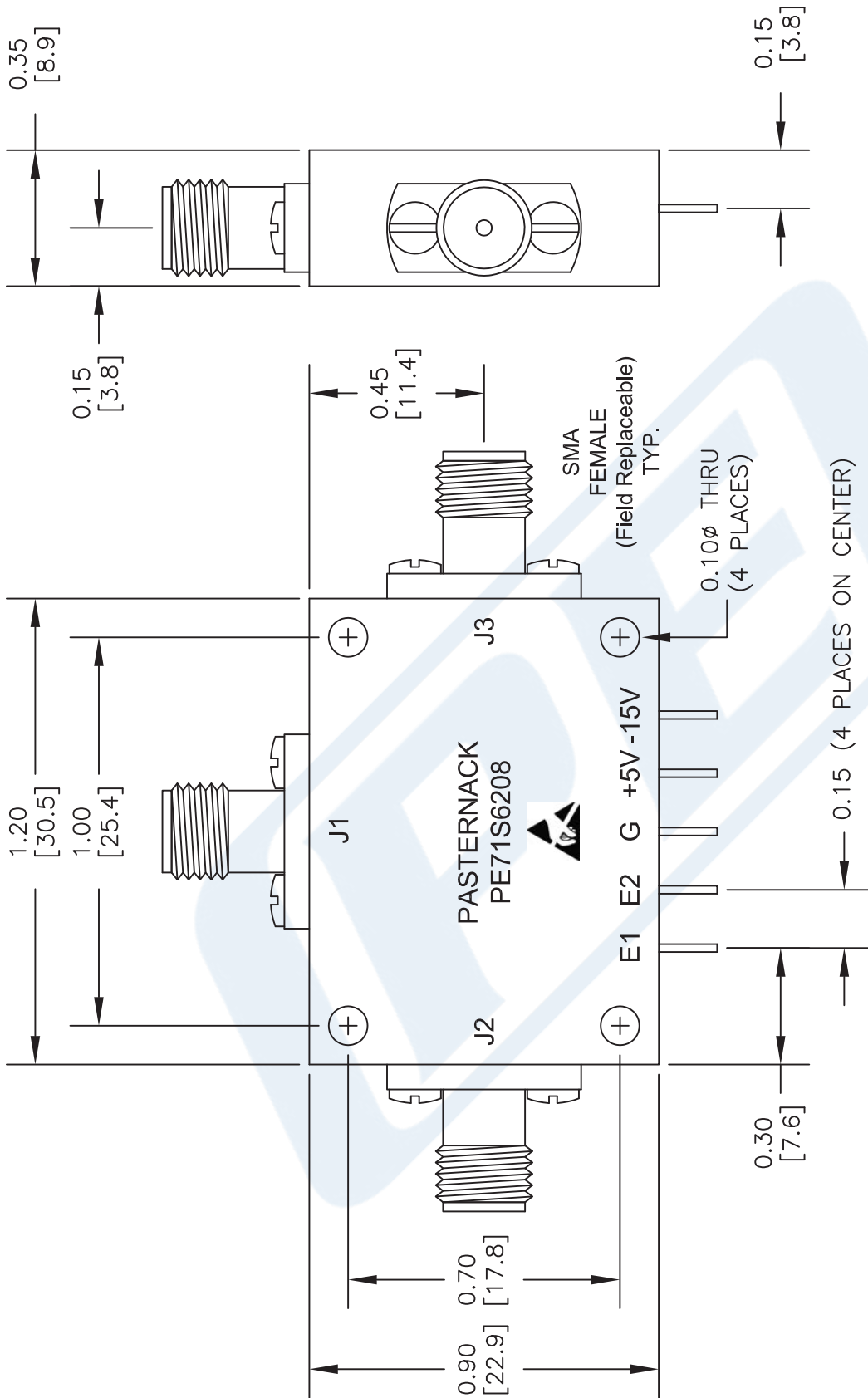
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA PE71S6208](http://www.pasternack.com/absorptive-spdt-pin-diode-switch-4-ghz-27-dbm-sma-pe71s6208-p.aspx)

URL: <http://www.pasternack.com/absorptive-spdt-pin-diode-switch-4-ghz-27-dbm-sma-pe71s6208-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.

PE71S6208 CAD Drawing

Absorptive SPDT PIN Diode Switch Operating From 2 GHz to 4 GHz Up to +27 dBm and Field Replaceable SMA



E1	E2	FUNCTION
0	1	J1-J2 LOW LOSS
1	0	J1-J3 LOW LOSS

ALL DIMENSIONS ARE IN INCHES.
 TOLERANCES:
 X.XX ±0.010
 X.XXX ±0.005

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

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
PE71S6208

PE 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

CAD FILE 041116 SCALE N/A SIZE A 2233

FSCM NO. 53919