

Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA



PIN Diode Switches Technical Data Sheet

PE71S6238

Features

- SPDT Absortive Switch
- 4.0 GHz to 8.0 GHz
- Insertion Loss 1.9 dB max

Applications

- Test & Measurement
- Military Communication
- Commercial Communication

- Isolation 70 dB min
- Power Input 20 dBm CW max
- Field Replaceable Connectors
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

Description

The PE71S6238 is a Single Pole Double Throw (SPDT) Absorptive PIN Diode Switch that operates from 4 GHz to 8 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Outstanding performance includes < 1.9 dB insertion loss, > 70 dB isolation, and < 100 nsec switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -40°C to +85°C and dual voltage controls of +5 DC and -15 DC 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 | 4 | | 8 | GHz |
| Impedance | | 50 | | Ohms |
| Insertion Loss | | | 1.9 | dB |
| Isolation | 70 | | | 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 | | 100 | | mA |
| Current @ -15 V | | 100 | | 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 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA PE71S6238

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451 Sales@Pasternack.com • Techsupport@Pasternack.com

PE71S6238 REV 1.0



© 2016 Pasternack Enterprises All Rights Reserved



Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet



PE71S6238

Mechanical Specifications

Size Length Width Height Weight Finish

Configuration

Design **RF** Connector **RF** Connector Option **TTL Control Connector**

Environmental Specifications

Temperature **Operating Range** Storage Range

Humidity Shock Vibration Altitude **Temperature Cycling ESD** Sensitivity



1 in [25.4 mm] 1 in [25.4 mm] 0.4 in [10.16 mm] 0.05 lbs [22.68 g] Blue Paint

Absorptive, SPDT **SMA Female** Field Replaceable Solder Pin

-40 to +85 deg C -55 to +125 deg C

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 for current document) Not RoHS Compliant **REACH** Compliant

12/17/2015

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 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA PE71S6238

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451



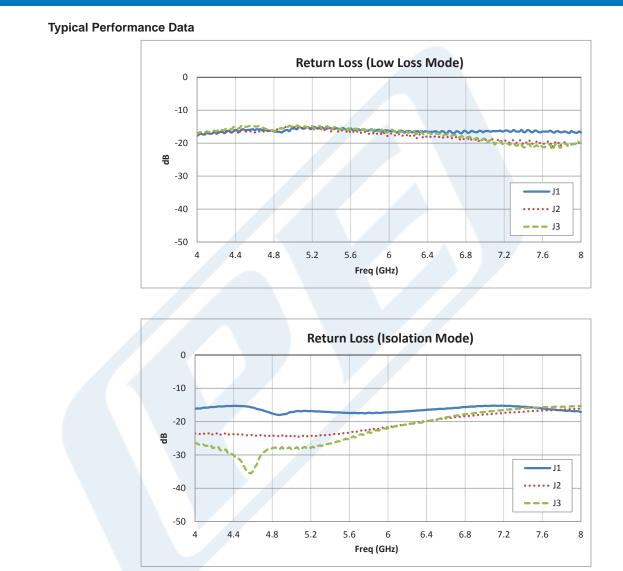


Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA



PIN Diode Switches Technical Data Sheet

PE71S6238



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 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA PE71S6238

ISO 9001 : 2008 Registered

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451





PE71S6238

Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

Insertion Loss 0 -1 200 -2 qB -3 J1-J2 -4 •••• |1-|3 -5 4.4 4.8 5.2 5.6 7.2 7.6 4 6 6.4 6.8 8 Freq (GHz) Isolation -40 J1-J2 -60 ••••• J1-J3 -80 dВ -100 -120 -140 4.8 5.2 5.6 6 6.4 7.2 7.6 8 4 44 6.8 Freq (GHz)

Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 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.

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 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA PE71S6238

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451





Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA



PIN Diode Switches Technical Data Sheet

PE71S6238

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 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA PE71S6238

URL: http://www.pasternack.com/absorptive-spdt-pin-diode-switch-8-ghz-20-dbm-sma-pe71s6238-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.



PE71S6238 CAD Drawing

Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA

