

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



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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:

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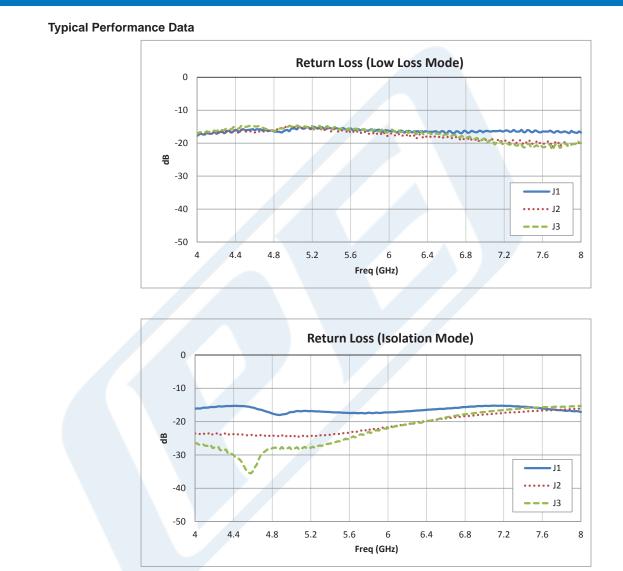


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Insertion Loss 0 -1 200 -2 qB -3 J1-J2 -4 •••• |1-|3 -5 4.4 4.8 5.2 5.6 7.2 7.6 4 6 6.4 6.8 8 Freq (GHz) Isolation -40 J1-J2 -60 ••••• J1-J3 -80 dВ -100 -120 -140 4.8 5.2 5.6 6 6.4 7.2 7.6 8 4 44 6.8 Freq (GHz)

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.

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

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PE71S6238 CAD Drawing

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