

SPST PIN Diode Switch Operating From 10 MHz to 1,000 MHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA



PIN Diode Switches Technical Data Sheet

PE71S6258

Features

- SPST Reflective Switch
- 0.01 GHz to 1.0 GHz
- Insertion Loss 1 dB typ

Applications

- Test & Measurement
- Military Communication
- Commercial Communication

- Isolation 80 dB typ
- Power Input 20 dBm CW max
- Field Replaceable Connectors
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

Description

The PE71S6258 is a Single Pole Single Throw (SPST) Reflective PIN Diode Switch that operates from 0.01 GHz to 1 GHz. Outstanding typical performance includes 1.0 dB typ insertion loss, 80 dB typ isolation, and 200 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 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	10		1,000	MHz
Impedance		50		Ohms
Insertion Loss		1		dB
Isolation		80		dB
Rise Time			80	ns
Switching Time			200	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-15		Vdc
Current @ 5 Vdc		20		mA
Current @ -15 Vdc		20		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: SPST PIN Diode Switch Operating From 10 MHz to 1,000 MHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA PE71S6258

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

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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] 0.5 in [12.7 mm] 0.058 lbs [26.31 g] Blue Paint

Reflective, SPST SMA Female Field Replaceable Solder Pin

-55 to +85 deg C -65 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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Typical Performance Data

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dB Isolation 0 -24 -48 -72 -96 120 0.70 0.01 GHz 0.11 0.21 0.31 0.41 0.51 0.60 0.80 0.90 1.00

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SPST PIN Diode Switch Operating From 10 MHz to 1,000 MHz Up to 0.1 Watts (+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: https://www.pasternack.com/spst-pin-diode-switch-1000-mhz-20-dbm-sma-pe71s6258-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. <u>Pasternack does not make any representation or warranty regarding the suitability of the part</u> described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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PE71S6258

PE71S6258 CAD Drawing

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