



SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6274

Features

- SP3T Reflective Switch
- 8.0 GHz to 12.0 GHz
- Insertion Loss 2.4 dB typ
- Isolation 70 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 PE71S6274 is a Single Pole Triple Throw (SP3T) Reflective PIN Diode Switch that operates from 8 GHz to 12 GHz. Typical performance includes < 2.4 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 -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	8		12	GHz
Impedance		50		Ohms
Insertion Loss		2.4		dB
Isolation	70			dB
Switching Time			100	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-15		Vdc
Current @ 5 Vdc		150		mA
Current @ -15 Vdc		75		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: [SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6274](#)



SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz
Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6274

Mechanical Specifications

Size

Length	1.5 in [38.1 mm]
Width	1.5 in [38.1 mm]
Height	0.4 in [10.16 mm]
Weight	0.095 lbs [43.09 g]
Finish	Blue Paint

Configuration

Design	Reflective, SP3T
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 (see [product page](#) for current document)

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: [SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6274](#)

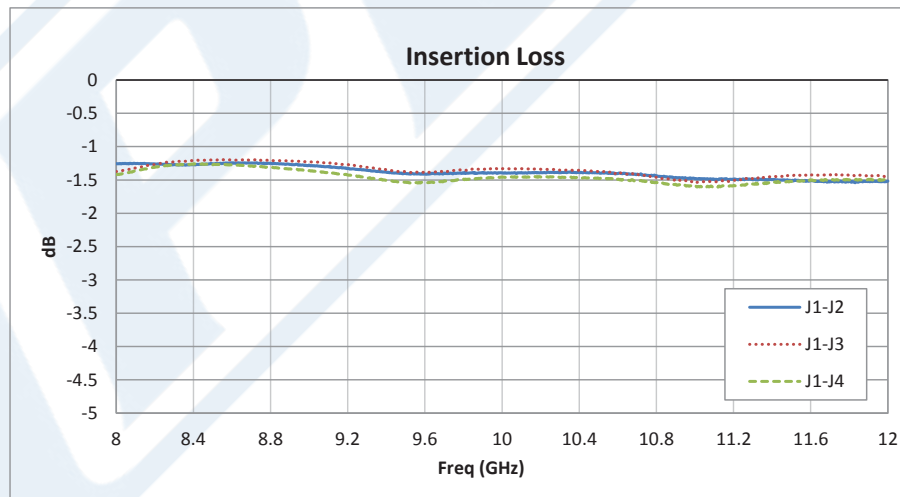
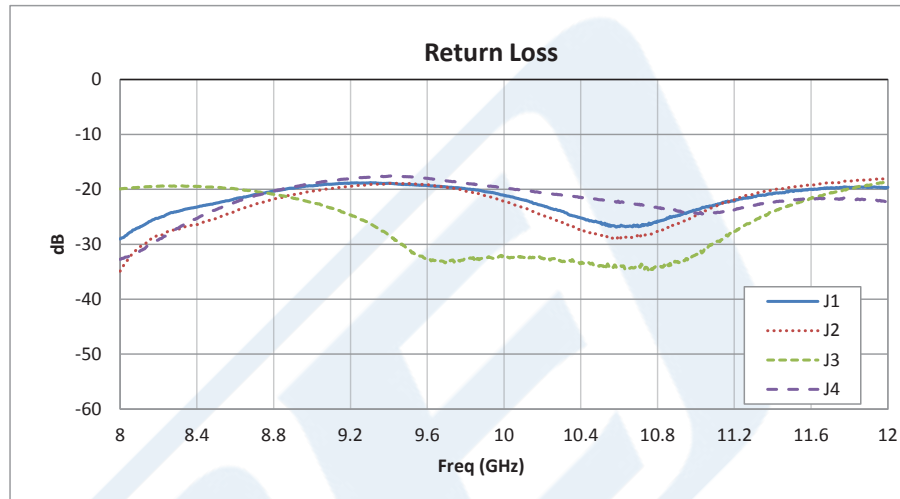


SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz
Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6274

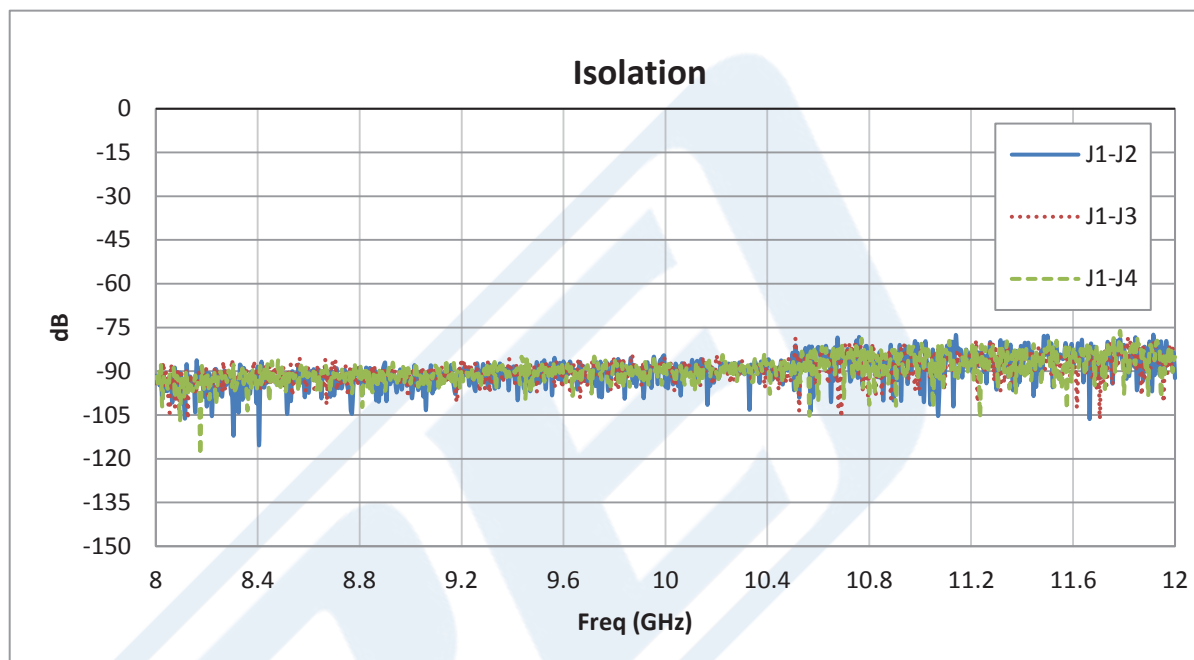
Typical Performance Data



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6274](#)



SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz
Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA



SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz 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 99.4% availability and are part of the broadest selection in the industry.

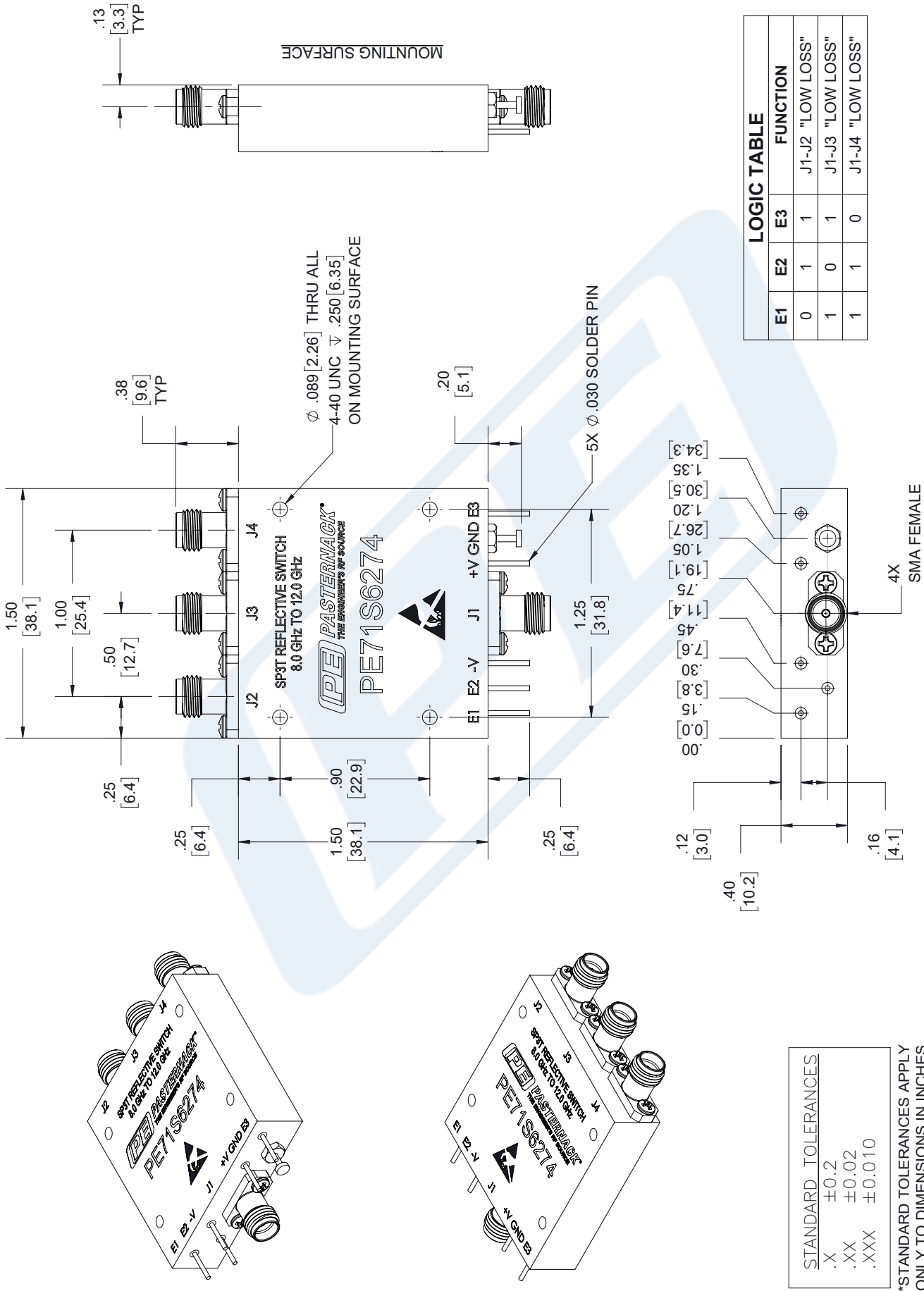
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts \(+20 dBm\) and Field Replaceable SMA PE71S6274](https://www.pasternack.com/sp3t-pin-diode-switch-12-ghz-20-dbm-sma-pe71s6274-p.aspx)

URL: <https://www.pasternack.com/sp3t-pin-diode-switch-12-ghz-20-dbm-sma-pe71s6274-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.

PE71S6274 CAD Drawing

SP3T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to 0.1 Watts (+20 dBm) and Field Replaceable SMA



DWG TITLE
PE71S6274

CAGE CODE **53919**

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 04/03/18

SCALE N/A

SIZE A 7361