



## SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA

### PIN Diode Switches Technical Data Sheet

PE71S6267

#### Features

- SPDT Reflective Switch
- 8.0 GHz to 12.0 GHz
- Insertion Loss 1.9 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 PE71S6267 is a Single Pole Double Throw (SPDT) Reflective PIN Diode Switch that operates from 8.0 to 12.0 GHz. Typical 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 -55°C to +85°C and dual voltage controls of +5 DC and -15 DC are required. The rugged package design is compact, features field replaceable female SMA connectors, and is designed to meet MIL-STD 202F environmental test conditions which include humidity, shock, vibration, altitude, and temperature cycle.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8		12	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		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: [SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6267](#)



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### Mechanical Specifications

#### Size

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]
Weight	0.05 lbs [22.68 g]
Finish	Blue Paint

#### Configuration

Design	Reflective, SPDT
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

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](http://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: [SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6267](#)

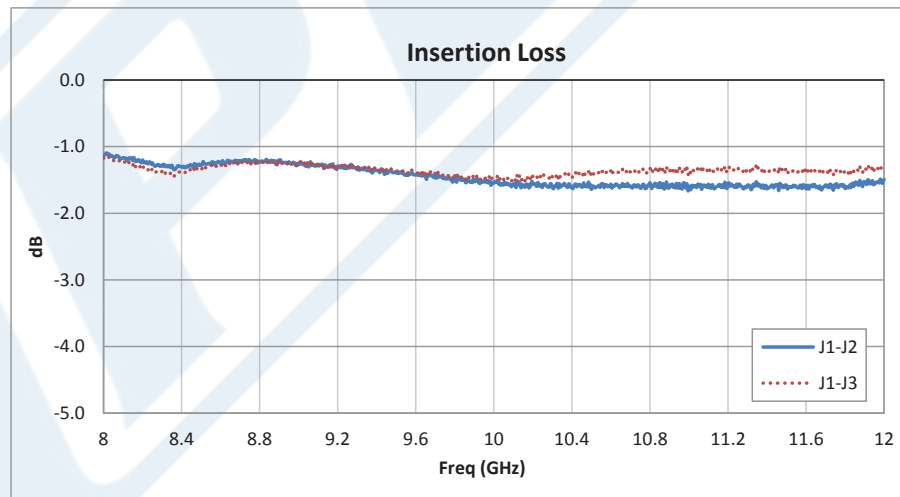
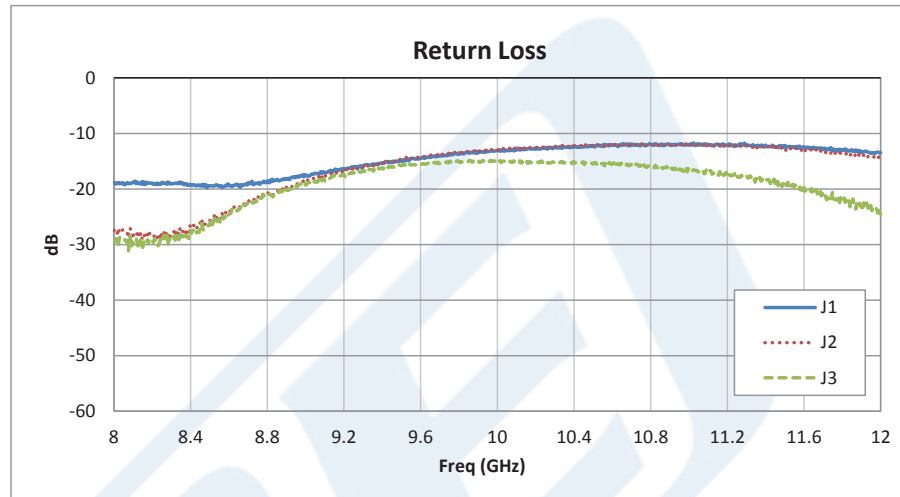


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### Typical Performance Data



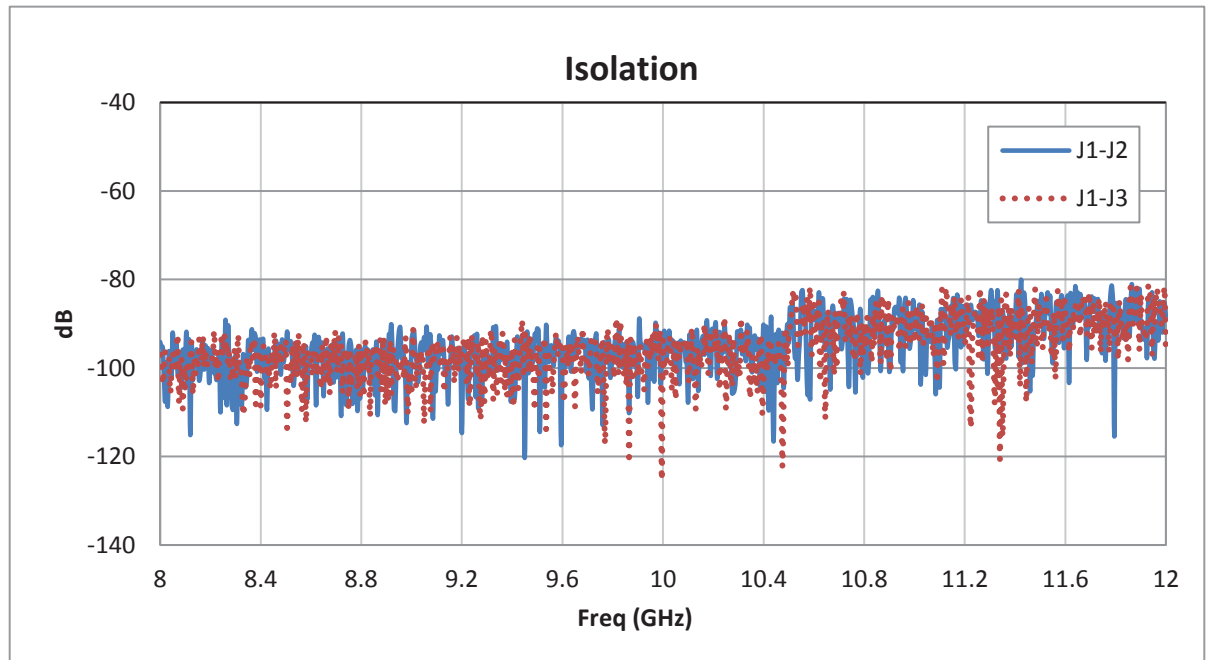
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SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

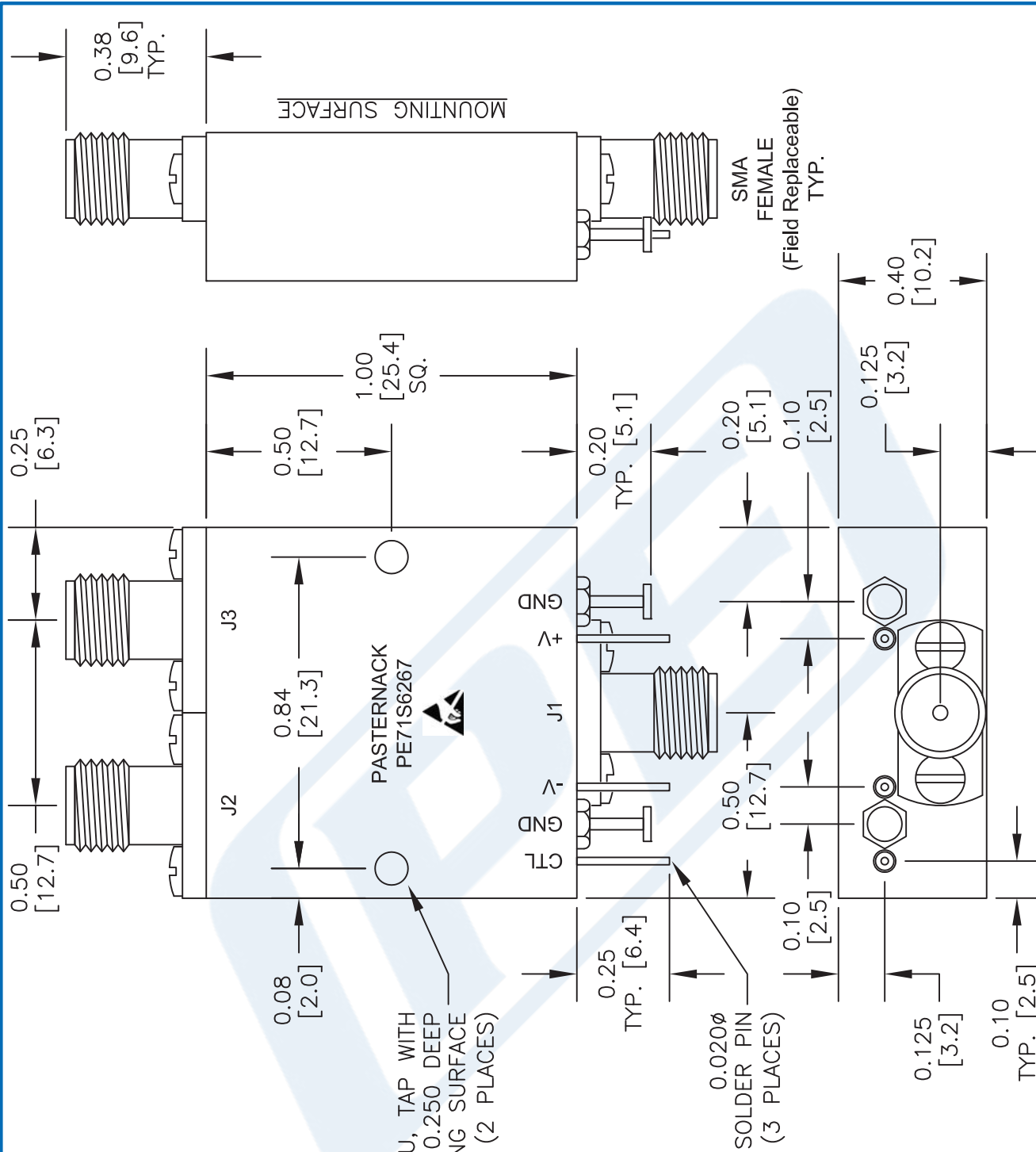
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6267](http://www.pasternack.com/spdt-pin-diode-switch-12-ghz-20-dbm-sma-pe71s6267-p.aspx)

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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.

# PE71S6267 CAD Drawing

SPDT PIN Diode Switch Operating From 8 GHz to 12 GHz  
Up to +20 dBm and Field Replaceable SMA



0.089 THRU, TAP WITH  
4-40 THREAD 0.250 DEEP  
ON MOUNTING SURFACE  
(2 PLACES)

0.020  
SOLDER PIN  
(3 PLACES)

LOGIC TABLE			
CTL	J1-J2	J1-J3	
0	ON	OFF	
1	OFF	ON	

ALL DIMENSIONS ARE IN INCHES.  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

\* 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  
**PE71S6267**

**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

FSCM NO. 53919

CAD FILE 040516

SCALE N/A

SIZE A

2233