



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 Absorptive Switch
- 4.0 GHz to 8.0 GHz
- Insertion Loss 1.9 dB max
- 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 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](#)



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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	Absorptive, SPDT
RF Connector	SMA Female
RF Connector Option	Field Replaceable
TTL Control Connector	Solder Pin

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 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 (visit www.Pasternack.com for current document)

Not RoHS Compliant	
REACH Compliant	12/17/2015

Plotted and Other Data

Notes:

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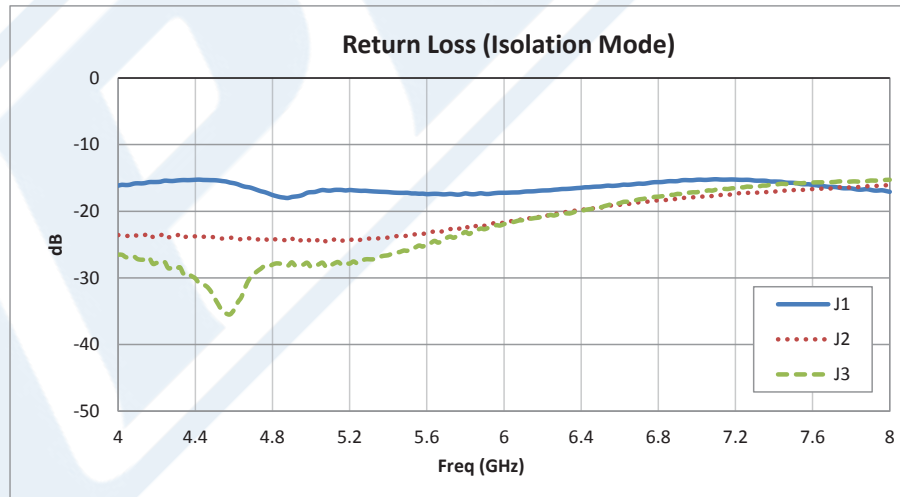
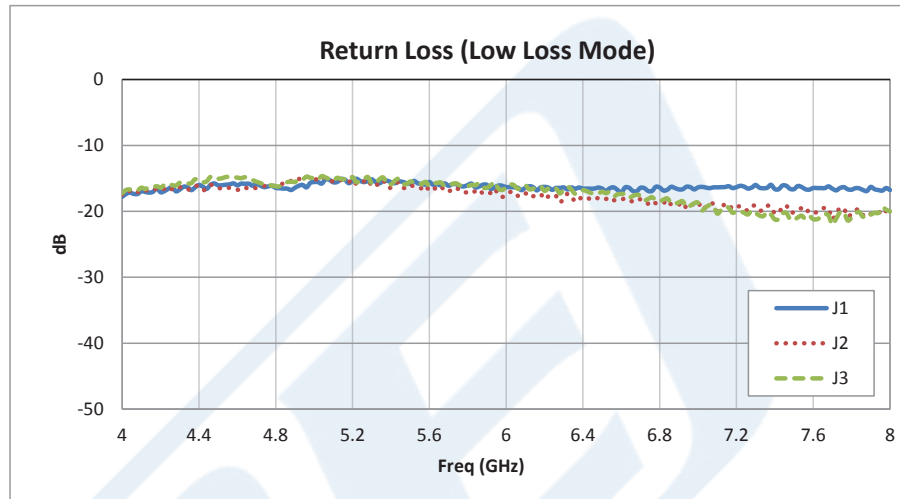


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Typical Performance Data



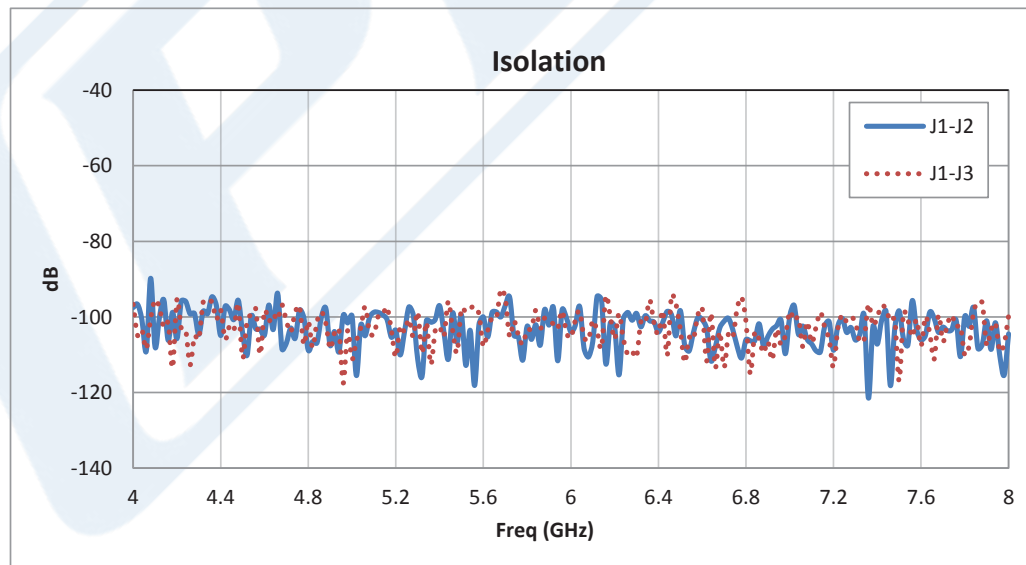
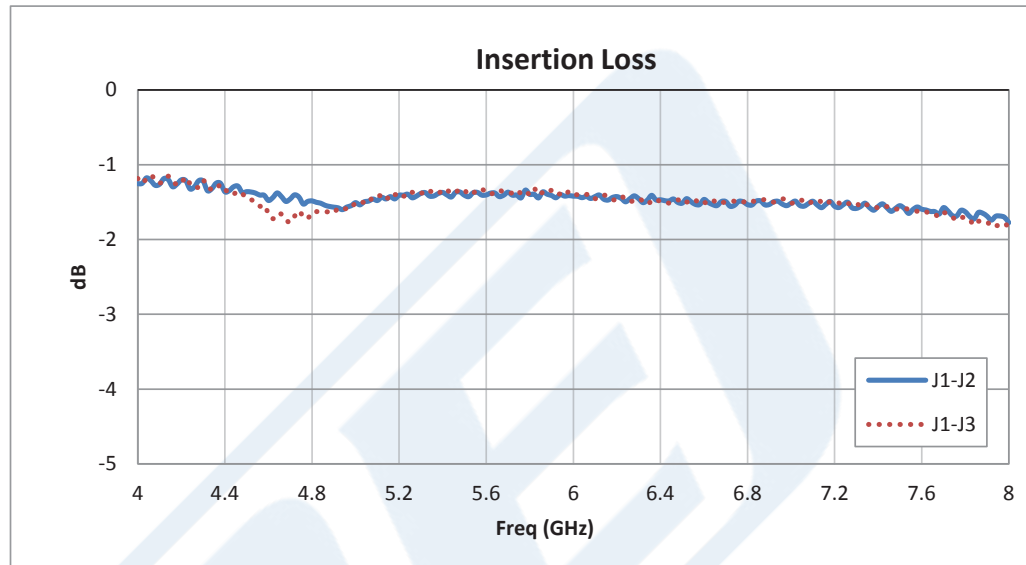
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Absorptive SPDT PIN Diode Switch Operating From 4 GHz to 8 GHz Up to +20 dBm and Field Replaceable SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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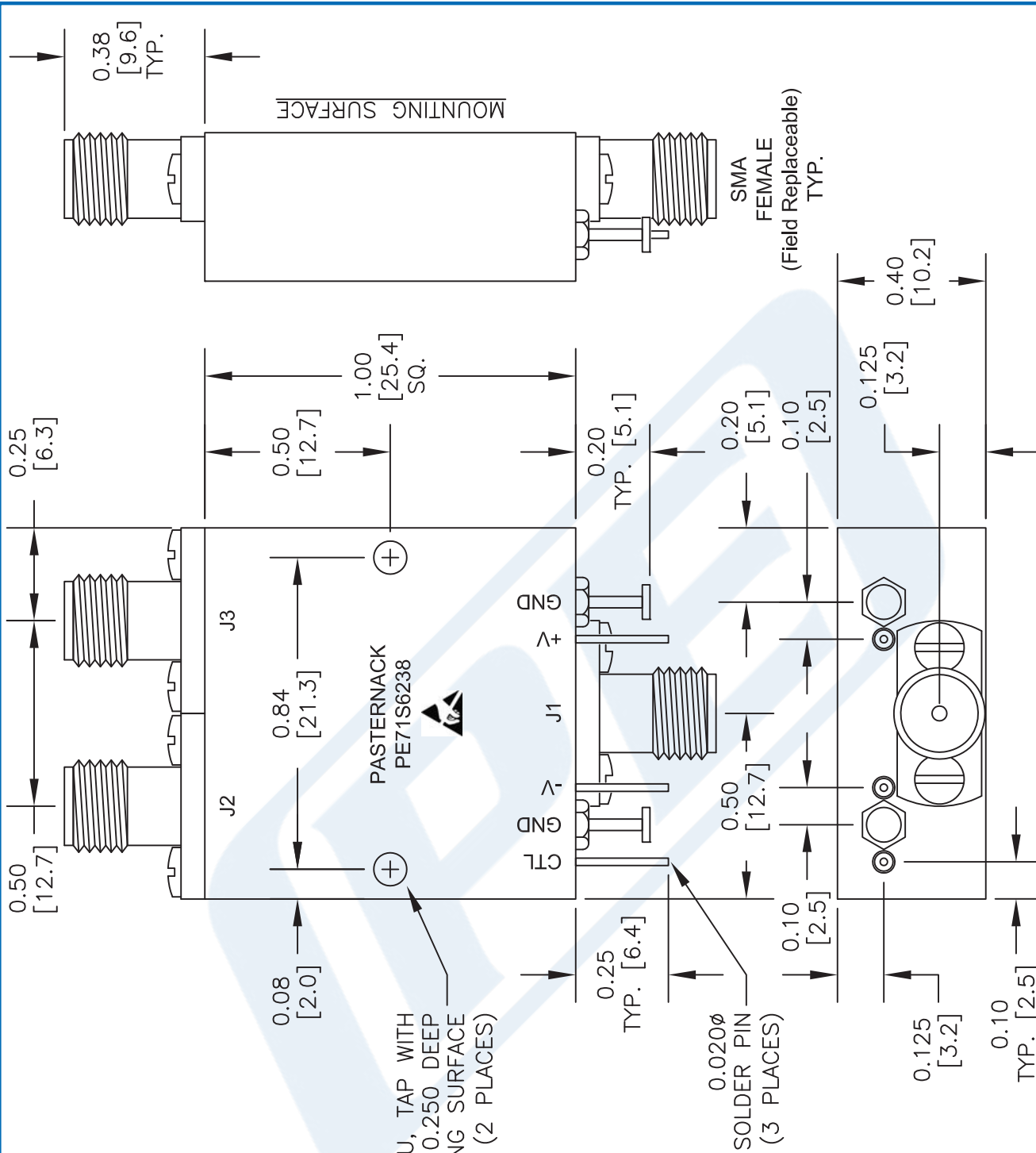
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PE71S6238 CAD Drawing

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



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

0.020 ϕ 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 \pm 0.020
X.XXX \pm 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
PE71S6238

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FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233