



SP4T PIN Diode Switch Operating From 6 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6285

Features

- SP4T Reflective Switch
- 6 GHz to 12 GHz GHz
- Insertion Loss 2.5 dB typ
- Isolation 70 dB min
- Input Power 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 PE71S6285 is a Single Pole Four Throw (SP4T) Reflective PIN Diode Switch that operates from 6 GHz to 18 GHz. Performance includes 2.5 dB typ insertion loss, 70 dB min isolation, and 50 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 VDC and -15 VDC 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	6		12	GHz
Impedance		50		Ohms
Insertion Loss		2.5		dB
Isolation	70			dB
Switching Time			50	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-15		Vdc
Current @ 5 Vdc		200		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: [SP4T PIN Diode Switch Operating From 6 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6285](#)



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Mechanical Specifications

Size

Length	1.25 in [31.75 mm]
Width	1.25 in [31.75 mm]
Height	0.4 in [10.16 mm]
Weight	0.07 lbs [31.75 g]
Finish	Blue Paint

Configuration

Design	Reflective, SP4T
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 for current document)

Not RoHS Compliant

REACH Compliant

12/17/2015

Plotted and Other Data

Notes:

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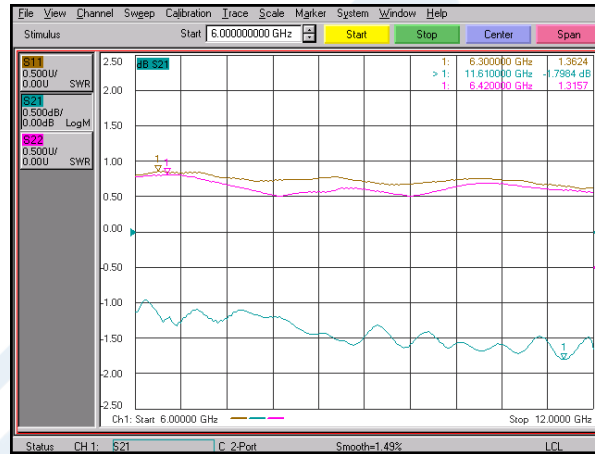
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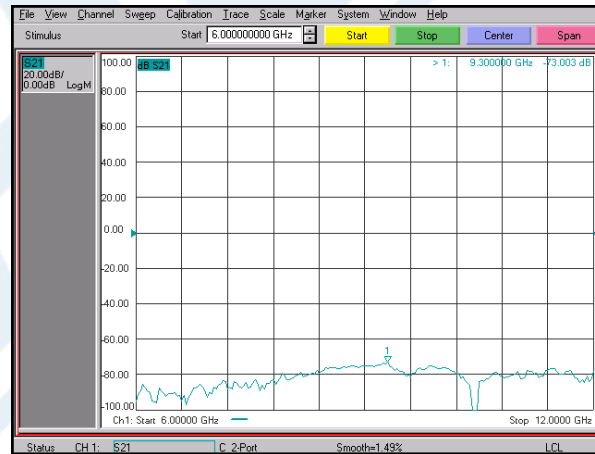
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Typical Performance Data

(J1 – J2) Insertion Loss and Return Loss



(J1 – J2) Isolation



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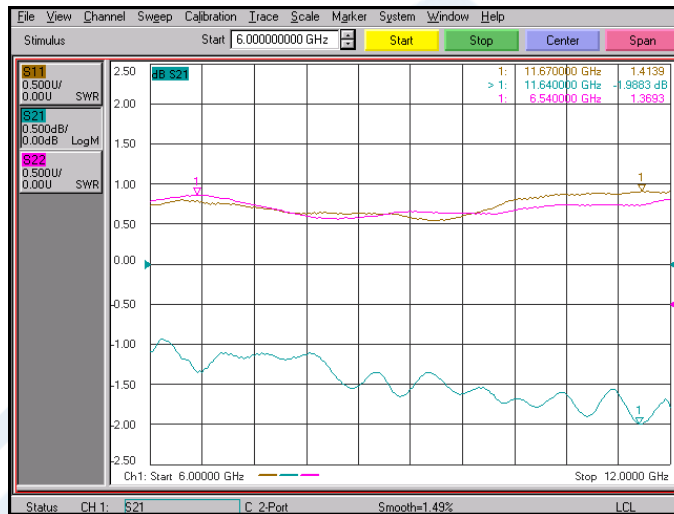


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(J1 – J3) Insertion Loss and Return Loss



(J1 – J3) Isolation



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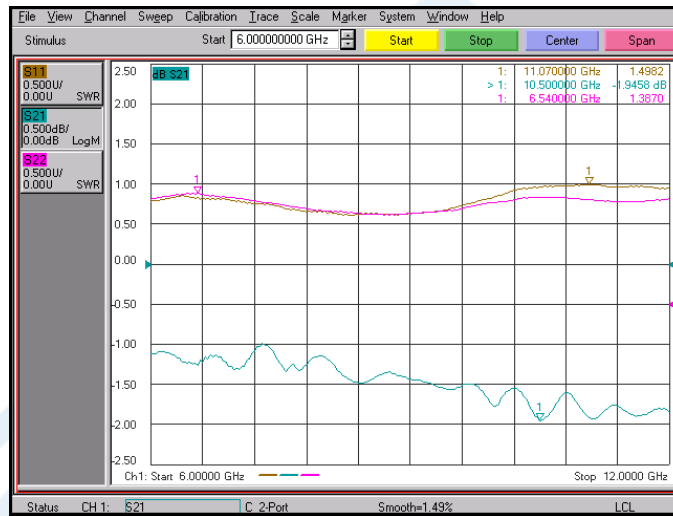


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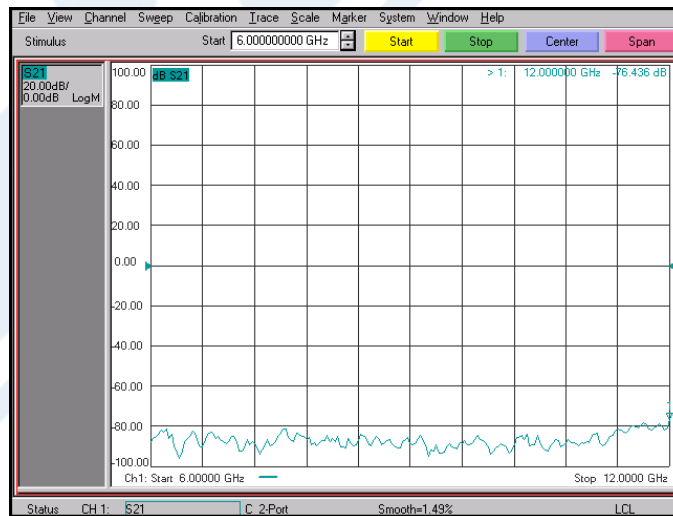
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(J1 – J4) Insertion Loss and Return Loss



(J1 – J4) Isolation



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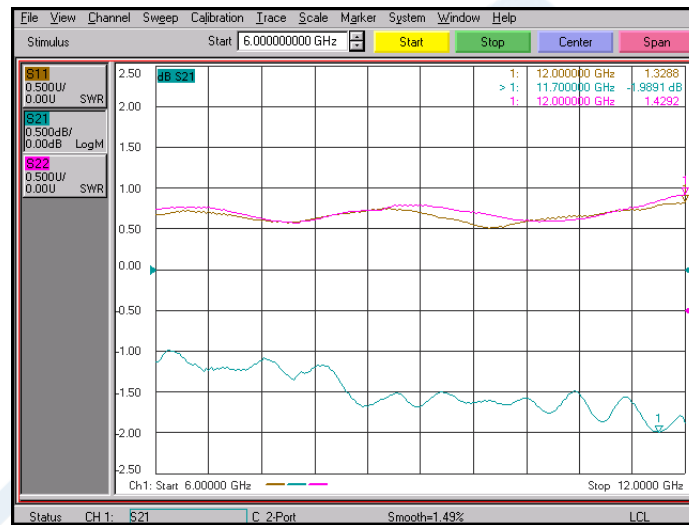


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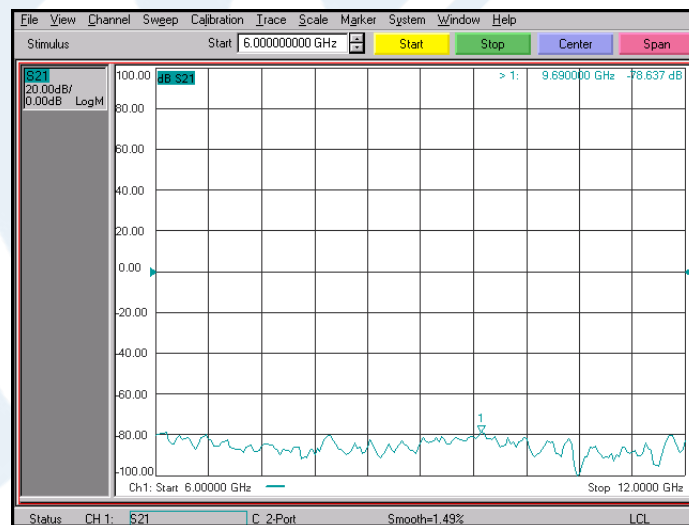
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(J1 – J5) Insertion Loss and Return Loss



(J1 – J5) Isolation



SP4T PIN Diode Switch Operating From 6 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.

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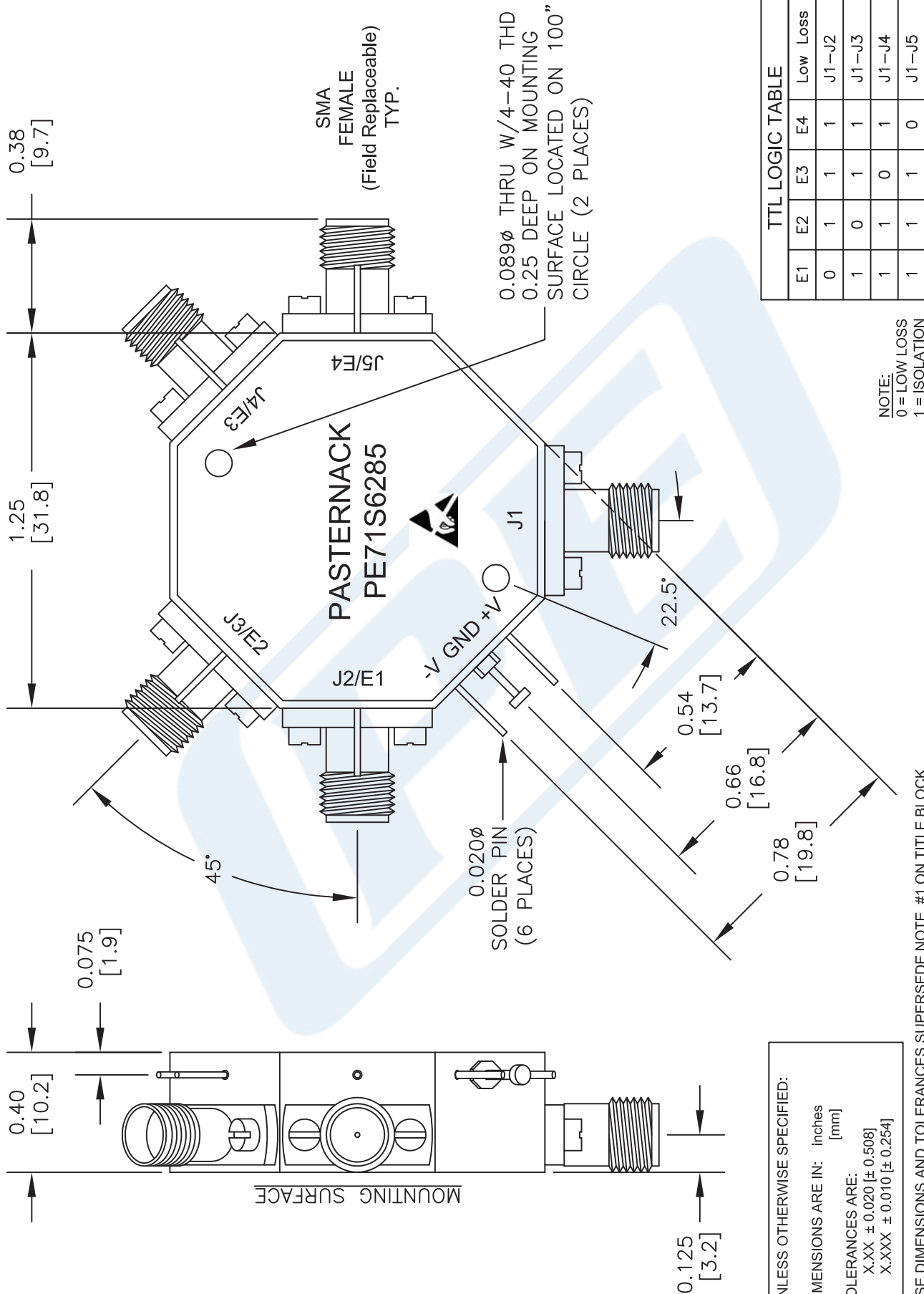
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PE71S6285 CAD Drawing

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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
PE71S6285

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FSCM NO. 53919

CAD FILE 040116

SCALE N/A

SIZE A

2233