



SP4T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA

PIN Diode Switches Technical Data Sheet

PE71S6281

Features

- SP4T Reflective Switch
- 8.0 GHz to 12.0 GHz
- Insertion Loss 2.2 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 PE71S6281 is a Single Pole Four Throw (SP4T) Reflective PIN Diode Switch that operates from 8.0 GHz to 12.0 GHz. Outstanding performance includes 2.2 dB typ insertion loss, 70 dB min isolation, and 100 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	8		12	GHz
Impedance		50		Ohms
Insertion Loss		2.2		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		200		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: [SP4T PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6281](#)



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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

Shock

MIL-STD-202F, Method 213B, Condition B

Vibration

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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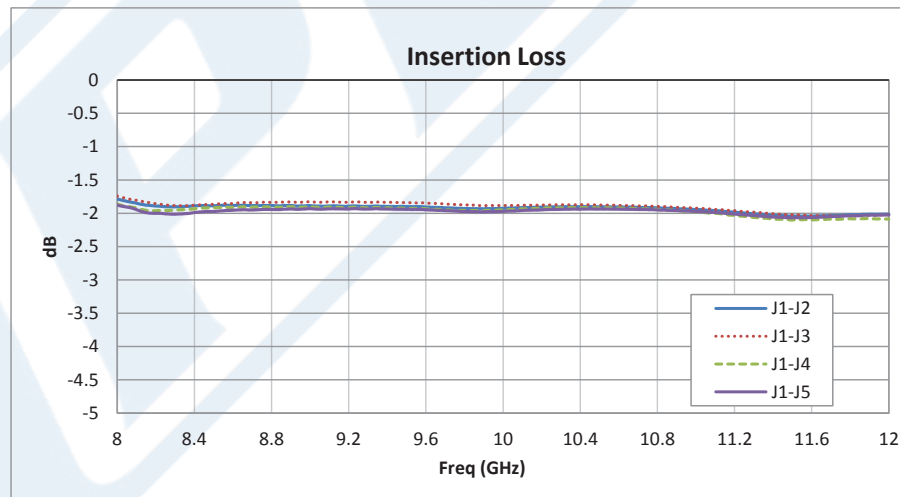
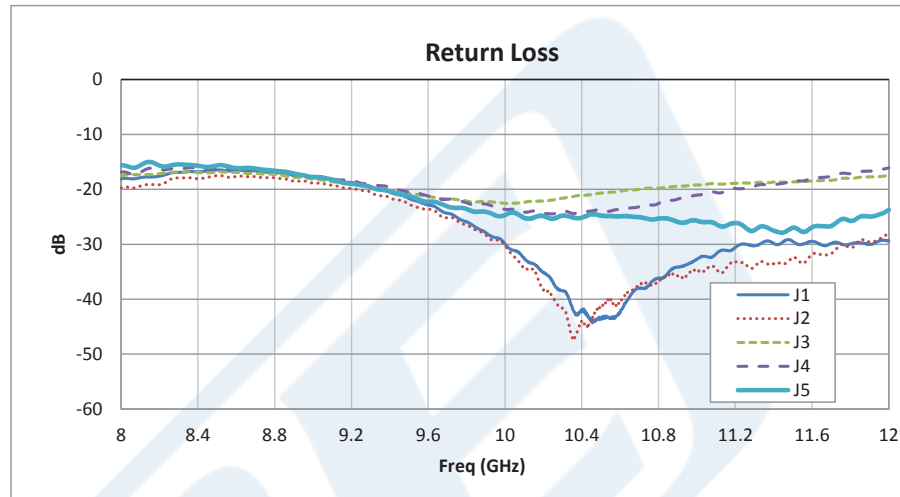


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Typical Performance Data



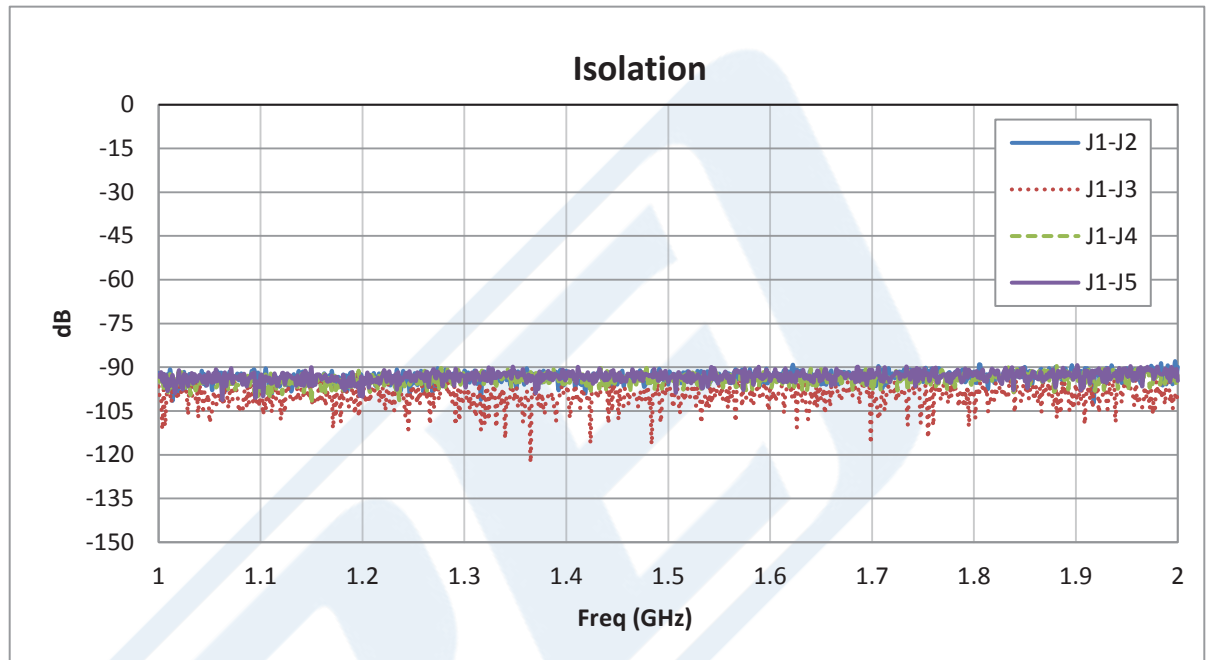
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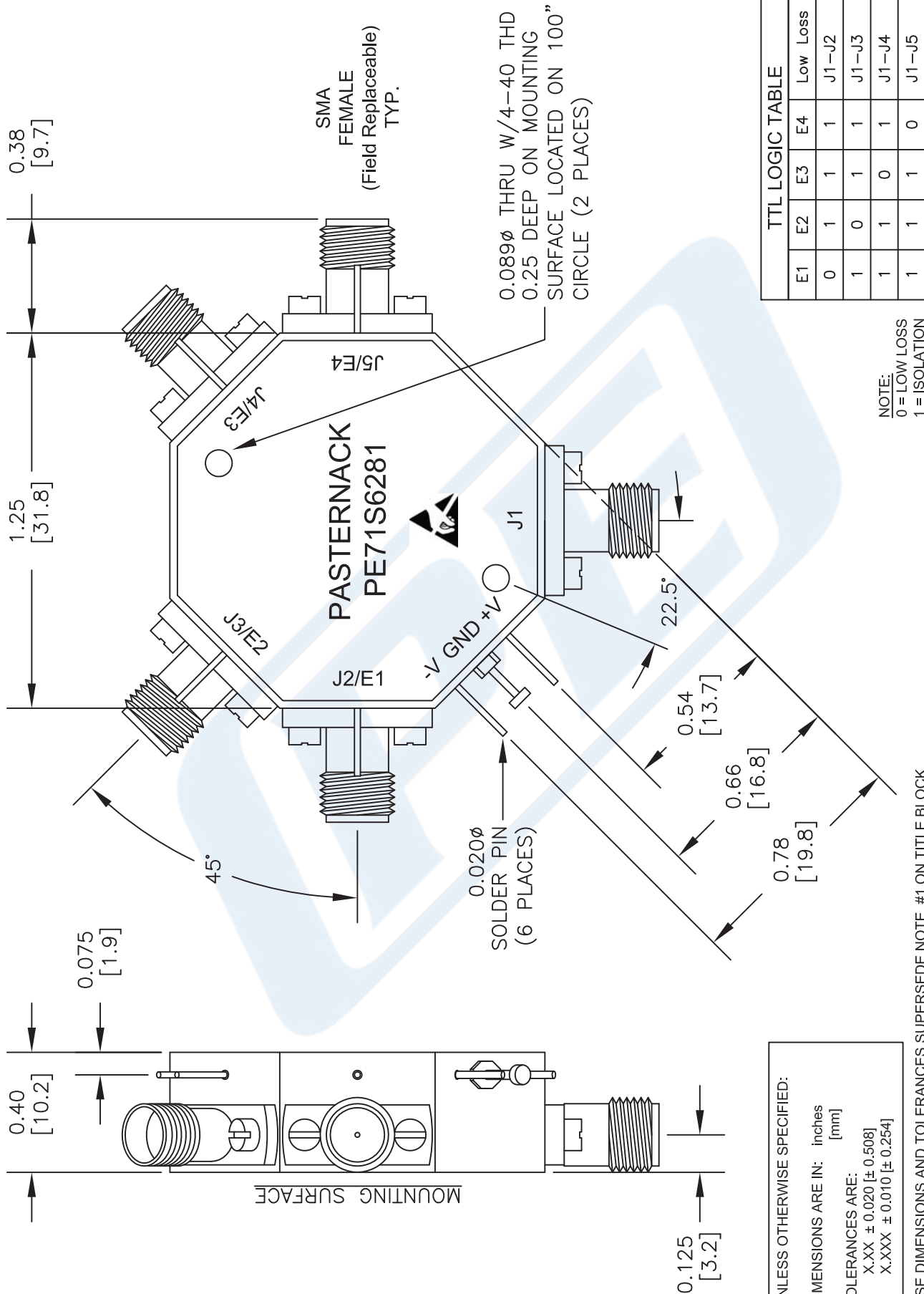
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PE71S6281 CAD Drawing

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* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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DWG TITLE

PE71S6281

FSCM NO. 53919

CAD FILE 040116

SCALE N/A

SIZE A

2233