



SPDT PIN Diode Switch Operating From 100 MHz to 67 GHz Up to +27 dBm and 1.85mm

## PIN Diode Switches Technical Data Sheet

PE71S2025

### Features

- SPDT Reflective Switch
- 0.1 GHz to 67 GHz
- Insertion Loss 7.5 dB max
- Isolation 20 dB min
- Power Input +27 dBm CW max

### Applications

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

### Description

The PE71S2025 is a Single Pole Double Throw (SPDT) Reflective PIN Diode Switch that operates from 0.1 to 67 GHz. Electrical performance includes 7.5 dB max insertion loss, -4 dB max return loss, 20 dB min isolation, and 100 nsec max switching speed. The design incorporates TTL-compatible driver circuitry for accurate logic control. Operational temperature range is -30°C to +60°C and dual voltage controls of +5 Vdc and -5 Vdc are required. The package interface uses solder terminals, 1.85mm Female connectors and an SMA Female connector.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.1		67	GHz
Impedance		50		Ohms
Return Loss			-4	dB
Insertion Loss			7.5	dB
Isolation	20			dB
Switching Time			100	ns
Input Power (CW)			0.5	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-5		Vdc
Current @ 5 Vdc		50		mA
Current @ -5 Vdc		50		mA
Operating Temperature	-30		+60	deg C

Electrical Specification Notes:  
 Specified switching time includes TTL driver delay.

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 100 MHz to 67 GHz Up to +27 dBm and 1.85mm PE71S2025](#)



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### Mechanical Specifications

#### Size

Length	1 in [25.4 mm]
Width	1.2 in [30.48 mm]
Height	0.6 in [15.24 mm]
Weight	0.119 lbs [53.98 g]
Design	Reflective, SPDT
RF Connector	1.85mm Female
TTL Control Connector	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	-30 to +60 deg C
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: [SPDT PIN Diode Switch Operating From 100 MHz to 67 GHz Up to +27 dBm and 1.85mm PE71S2025](#)

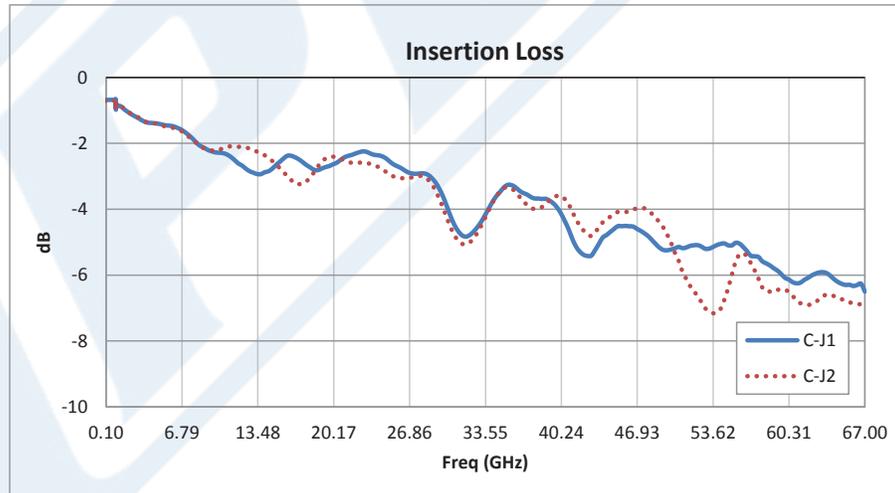
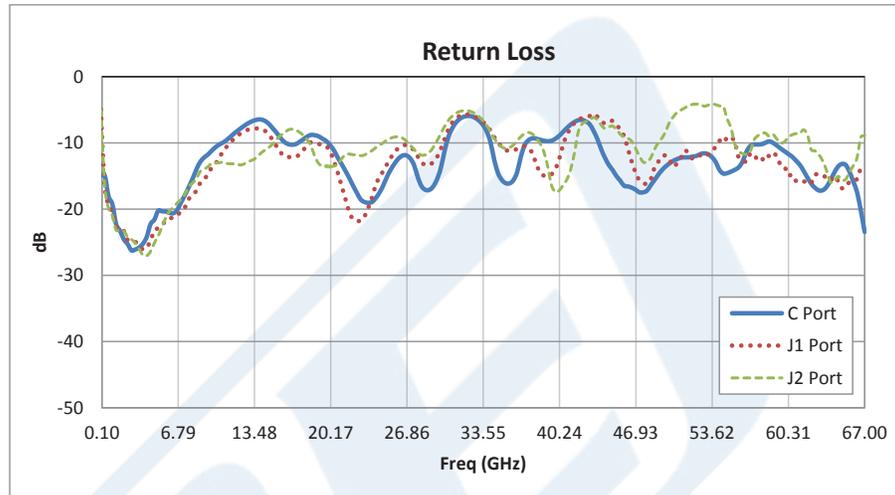


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Typical Performance Data



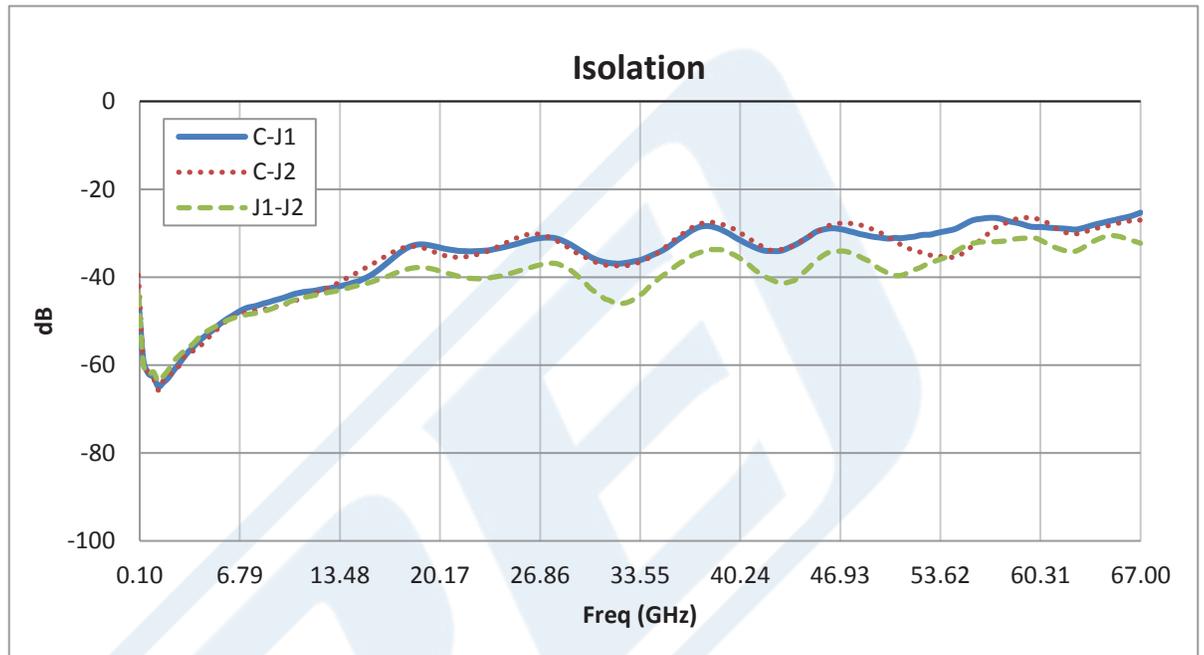
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SPDT PIN Diode Switch Operating From 100 MHz to 67 GHz Up to +27 dBm and 1.85mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

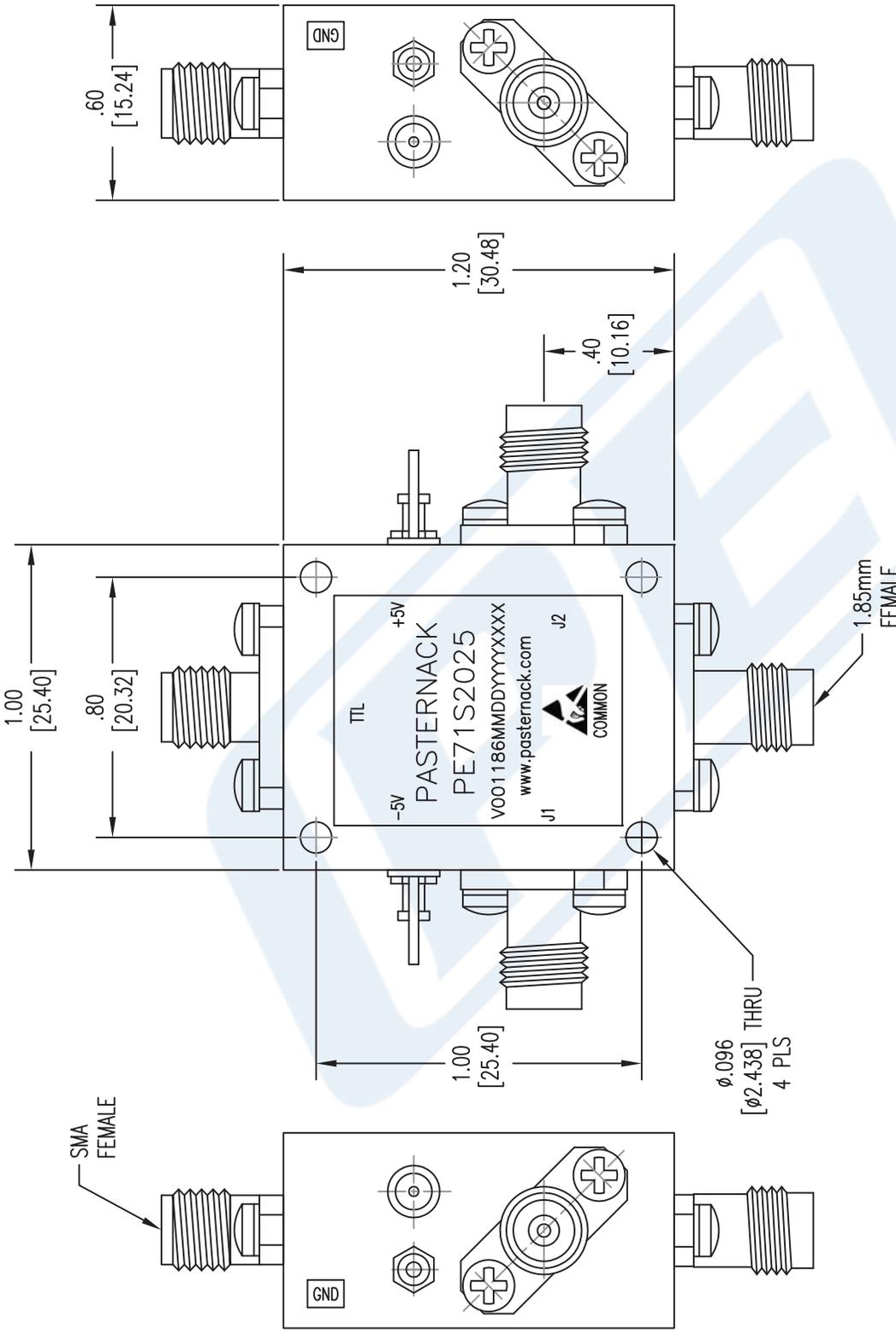
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SPDT PIN Diode Switch Operating From 100 MHz to 67 GHz Up to +27 dBm and 1.85mm PE71S2025](https://www.pasternack.com/spdt-pin-diode-switch-67-ghz-27-dbm-1.85mm-pe71s2025-p.aspx)

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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.

# PE71S2025 CAD Drawing

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UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN: inches [mm]  
 TOLERANCES ARE: [mm]  
 .XX ± .01 [± 2.54]  
 .XXX ± .005 [± .127]

\* 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].  
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE  
**PE71S2025**

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CAD FILE 121515

SCALE N/A

SIZE A

2233