



## Absorptive SP4T PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +20 dBm and Field Replaceable SMA

### PIN Diode Switches Technical Data Sheet

PE71S6212

#### Features

- SP4T Absorptive Switch
- 0.5 GHz to 18.0 GHz
- Insertion Loss 3.8 dB max
- Isolation 55 dB min
- Power Input 20 dBm CW max
- Switching Speed 100 nsec max

#### Applications

- Test & Measurement
- Military Communication
- Commercial Communication

#### Description

The PE71S6212 is a SP4T Absorptive Switch designed to operate over the 0.5 GHz to 18.0 GHz Frequency Range. The switch is designed to maintain low insertion loss, high isolation, and fast switching speed.

#### Electrical Specifications

| Description                | Minimum | Typical | Maximum | Units |
|----------------------------|---------|---------|---------|-------|
| Frequency Range            | 0.5     |         | 18      | GHz   |
| Impedance                  |         | 50      |         | Ohms  |
| VSWR                       |         |         | 2:1     |       |
| Insertion Loss             |         |         | 3.8     | dB    |
| Isolation                  | 55      |         |         | 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              |         | 160     |         | mA    |
| Current @ -15 V            |         | 50      |         | mA    |
| Operating Temperature      | -40     |         | +85     | deg C |

#### Mechanical Specifications

|                       |                    |
|-----------------------|--------------------|
| <b>Size</b>           |                    |
| Length                | 1.5 in [38.1 mm]   |
| Width                 | 1.5 in [38.1 mm]   |
| Height                | 0.6 in [15.24 mm]  |
| Weight                | 0.13 lbs [58.97 g] |
| Design                | Absorptive, SP4T   |
| RF Connector          | SMA Female         |
| RF Connector Option   | Field Replaceable  |
| TTL Control Connector | Solder Pin         |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SP4T PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +20 dBm and Field Replaceable SMA PE71S6212](#)



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### Environmental Specifications

#### Temperature

Operating Range

-40 to +85 deg C

Storage Range

-55 to +125 deg C

ESD Sensitivity

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:

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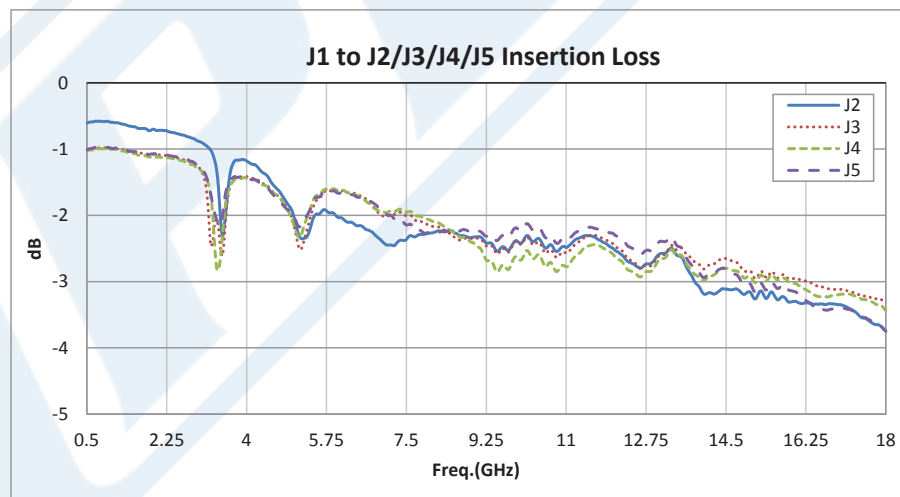
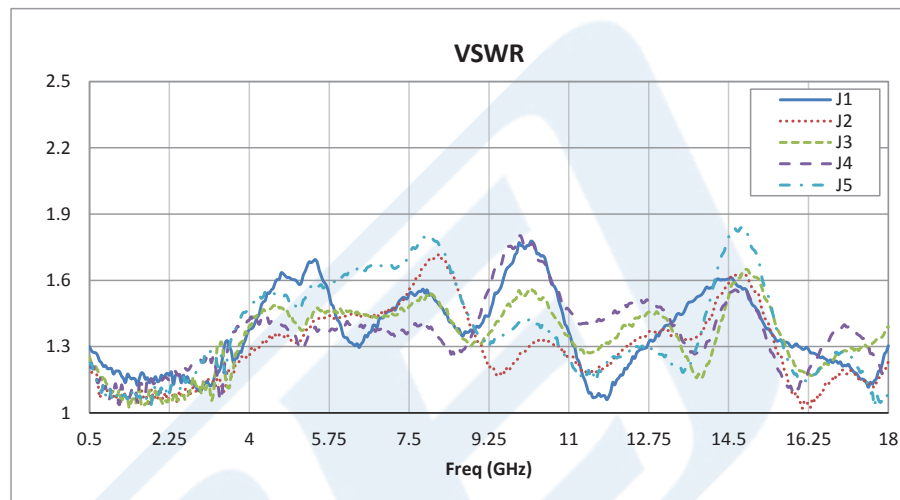


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### Typical Performance Data



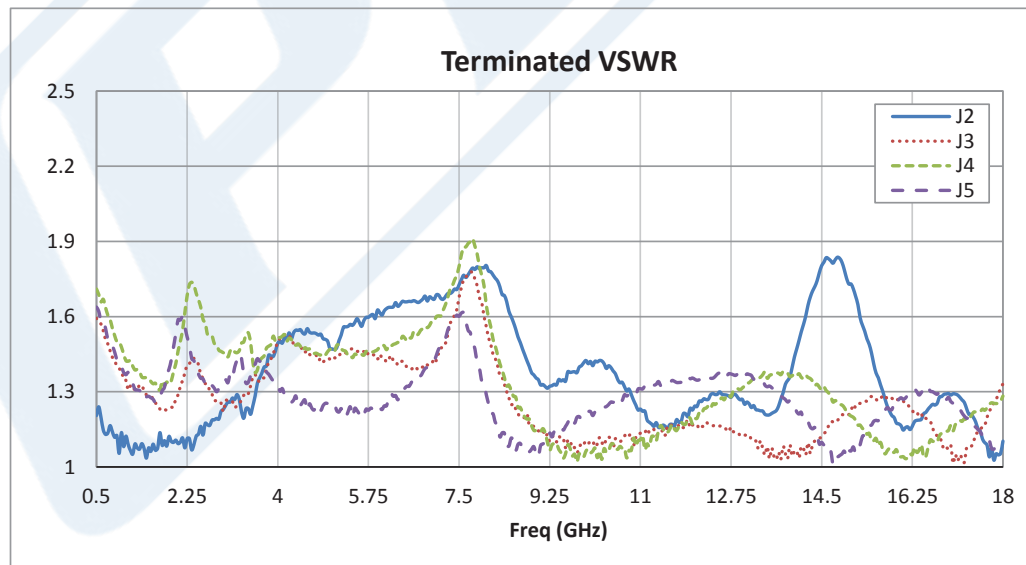
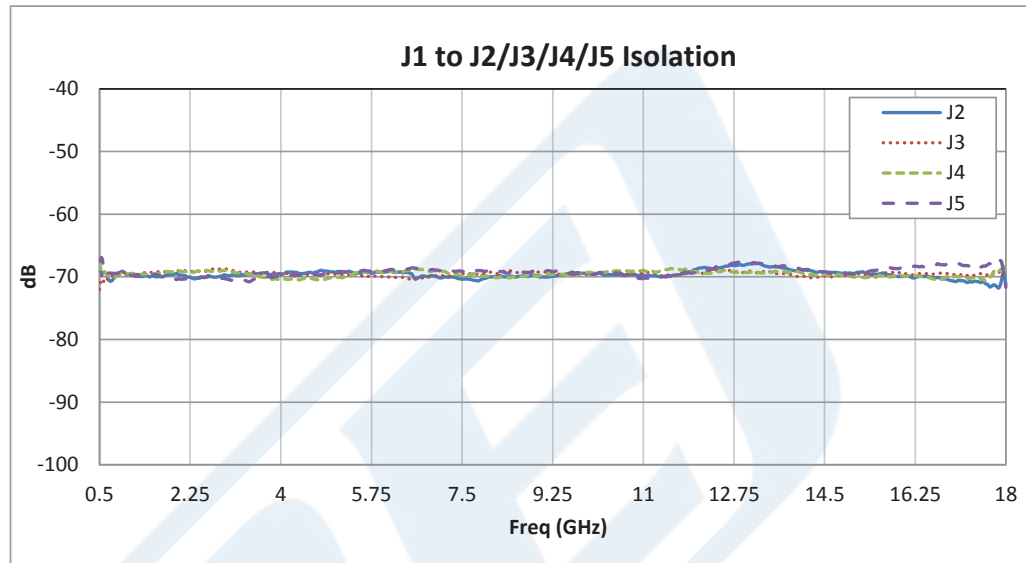
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Absorptive SP4T PIN Diode Switch Operating From 500 MHz to 18 GHz Up to +20 dBm and Field Replaceable SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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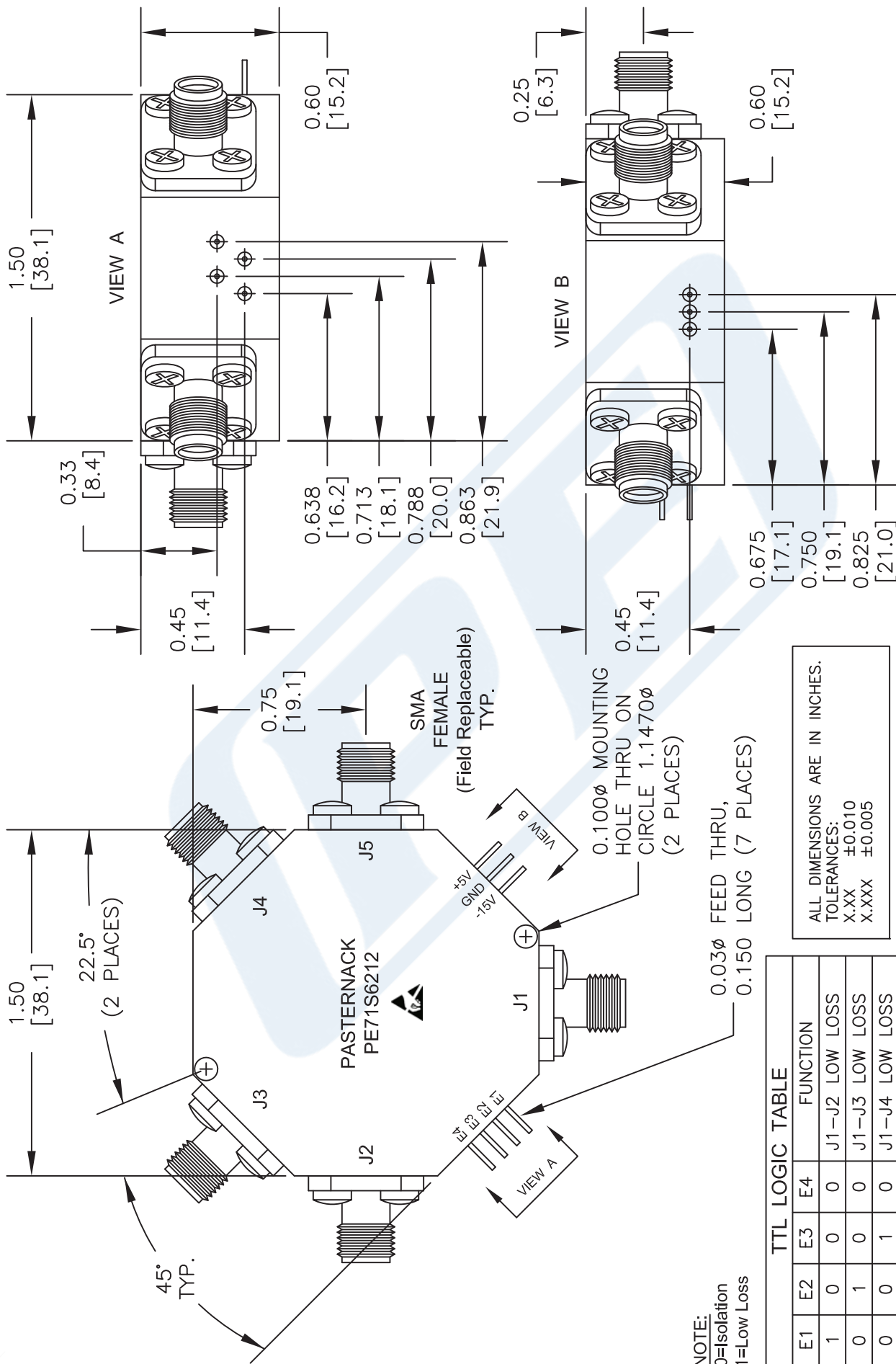
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE71S6212 CAD Drawing

Absorptive SP4T PIN Diode Switch Operating From 500 MHz to  
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DWG TITLE

**PE71S6212**

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].

FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233

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