



SP4T Electromechanical Relay Switch DC to 46 GHz, 2.92mm,  
 10 Watts, 12V Control with Latching, Indicators, TTL

**TECHNICAL DATA SHEET** PE71S6140

The PE71S6140 is Single Pole Four Throw Switch that operates from DC to 46 GHz. The switch has a latching actuator, Indicators and 1M life cycles. The switch has an operating voltage of 12 Volts and has TTL Control.

**Features**

- SP4T Switch
- DC to 46 GHz Operating Frequency Range
- 1 M Cycles min
- Normally Open Switch
- Indicators
- TTL Control
- Set Reset Circuitry
- Switching Sequence Break Before Make

**Applications**

- Test & Measurement
- Communications System
- Instrumentation

**Electrical Specifications**

|                         |  |
|-------------------------|--|
| Frequency Range         | DC to 46 GHz                               |
| Impedance               | 50 Ohms                                    |
| Actuator                | Latching, Indicators, TTL Logic            |
| Actuating Current       | 480 mA                                     |
| Control Voltage         | 12 Volts                                   |
| TTL Control             | "1": On, "0": Off, Enable: 5V, Disable: 0V |
| RF Input Power (Max CW) | 10 Watts                                   |

**RF Characteristic**

| Description         | Band 1  | Band 2  | Band 3   | Band 4     | Band 5     | Units |
|---------------------|---------|---------|----------|------------|------------|-------|
| Frequency Range     | DC to 6 | 6 to 12 | 12 to 18 | 18 to 26.5 | 26.5 to 46 | GHz   |
| VSWR, Max           | 1.3:1   | 1.4:1   | 1.5:1    | 1.7:1      | 2:1        |       |
| Insertion Loss, Max | 0.2     | 0.4     | 0.5      | 0.7        | 0.9        | dB    |
| Isolation, Min      | 70      | 60      | 60       | 55         | 50         | dB    |

**Mechanical Specifications**

|  |               |
|--|---------------|
| Connector Type                         | 2.92mm Female |
| Operating Life                         | 1,000,000     |
| Terminals                              | Solder Pins   |
| Switching Time (nominal voltage, 25°C) | 15 ms Max     |

**Environmental Specifications**

|                              |                  |
|------------------------------|------------------|
| <b>Temperature</b>           |                  |
| Operating Range              | -35 to +85 deg C |
| Environment                  | MIL-DTL-3928     |
| Housing Material and Plating | Aluminum         |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP4T Electromechanical Relay Switch DC to 46 GHz, 2.92mm, 10 Watts, 12V Control with Latching, Indicators, TTL PE71S6140](#)





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**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)  
Not RoHS Compliant

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation



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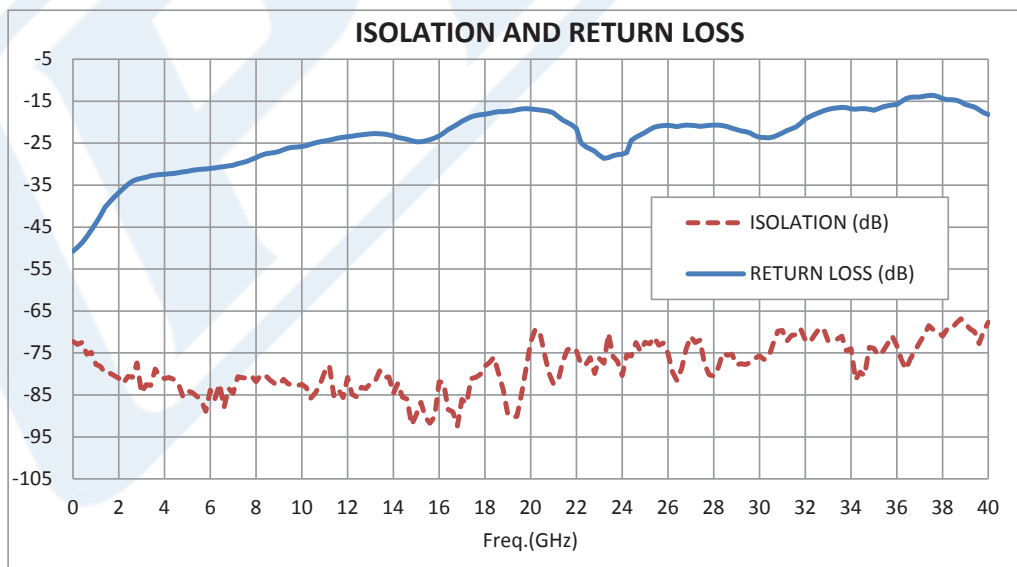
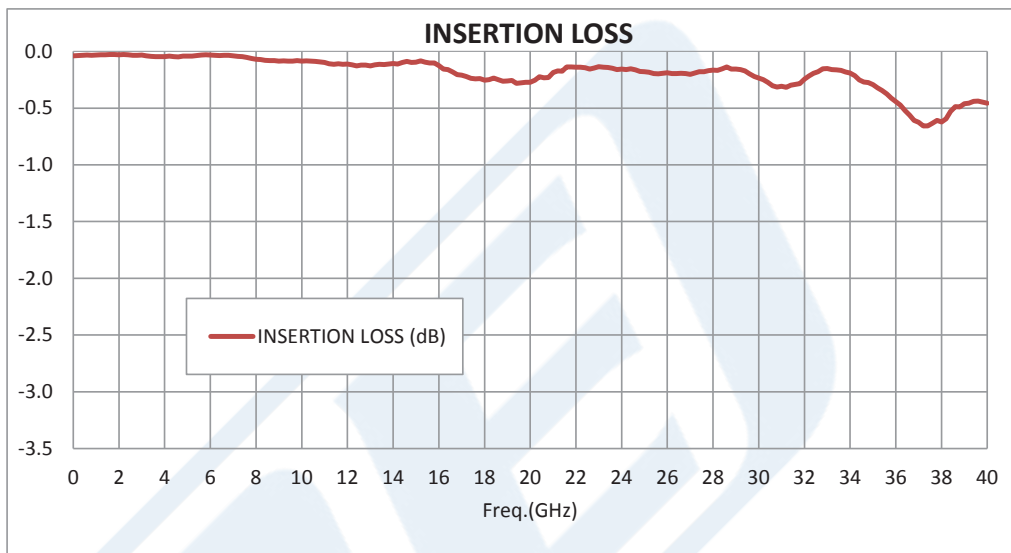


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Typical Performance Data



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SP4T Electromechanical Relay Switch DC to 46 GHz, 2.92mm, 10 Watts, 12V Control with Latching, Indicators, TTL 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.

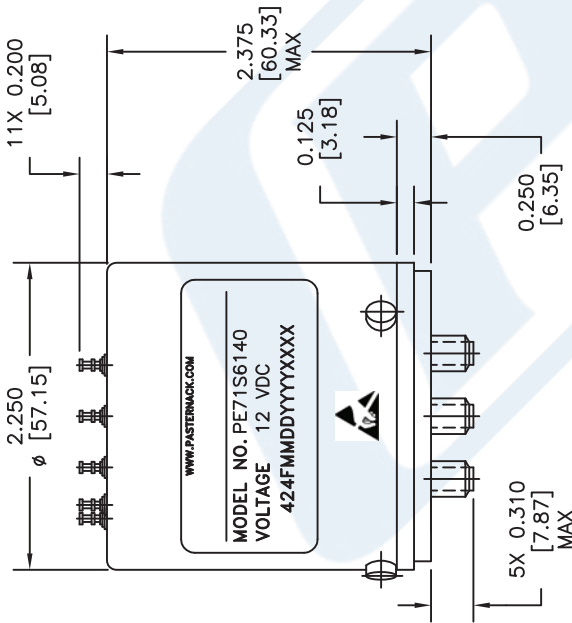
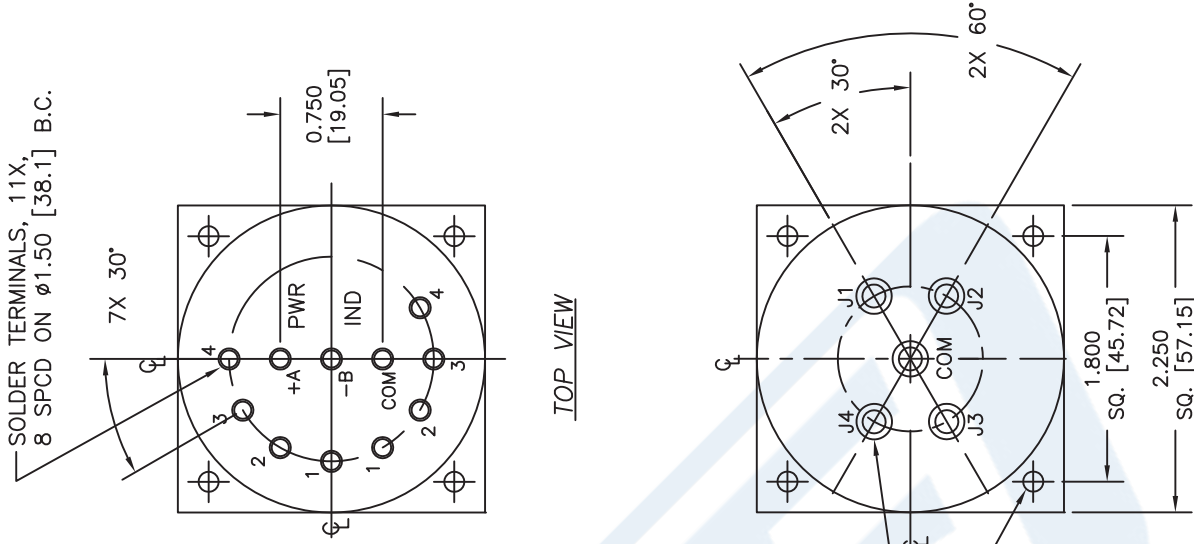
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PE71S6140 CAD Drawing

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| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: |                 |           |
|--|-----------------|-----------|
| DECIMALS   | ANGLES          | FRACTIONS |
| .XX ±.03   | ± 1°            | ± 1/16    |
| .XXX ±.010   |                 |           |
| HOLE DIAMETER  | TOLERANCE       |           |
| .0135 TO .125  | + .004 / - .001 |           |
| .126 TO .250   | + .005 / - .001 |           |
| .251 TO .500   | + .006 / - .001 |           |
| .501 TO .750   | + .008 / - .001 |           |
| .751 TO 1.000  | + .010 / - .001 |           |
| 1.001 TO 2.000   | + .012 / - .001 |           |

\* 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  
**PE71S6140**

FSCM NO. 53919

CAD FILE 040615

SCALE N/A

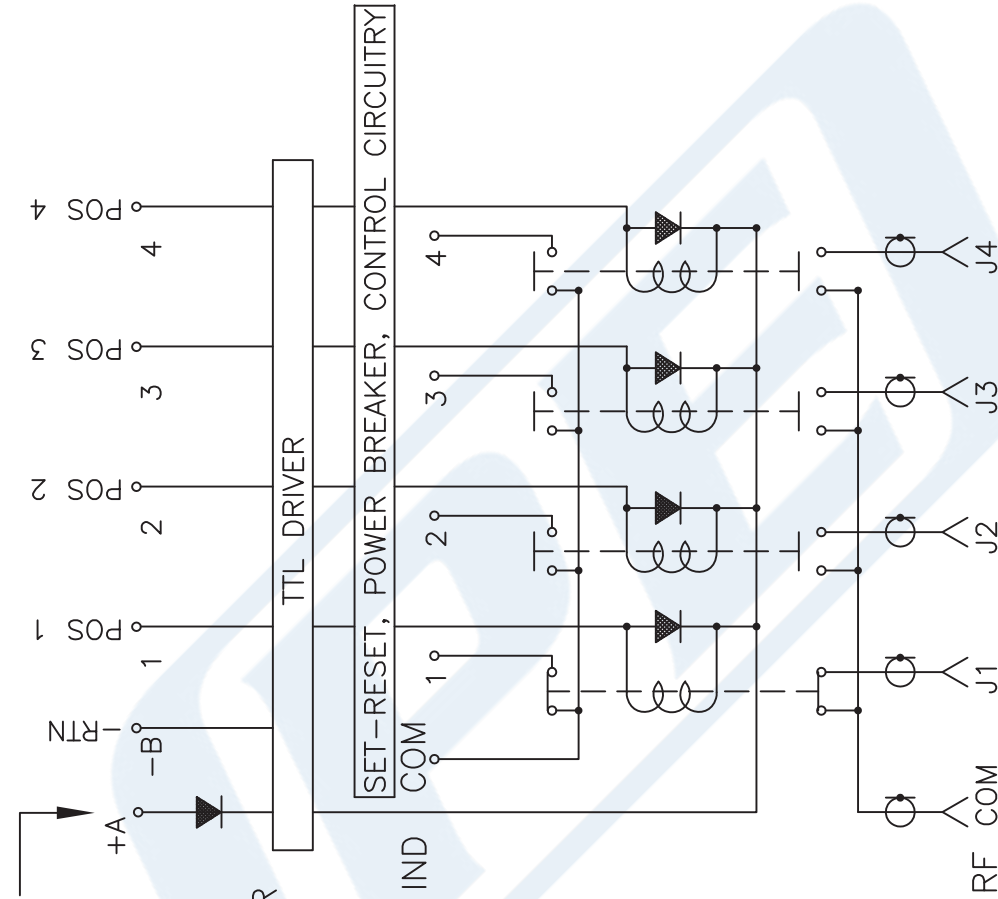
SIZE A

2233

**PE PASTERNAK®**  
 THE ENGINEER'S RF SOURCE  
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# PE71S6140 CAD Drawing

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SCHEMATIC LATCHING SHOWN IN POSITION 1

DWG TITLE

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