



SP4T Electromechanical Relay Switch DC to 22 GHz,  
SMA, 20 Watts, 12V Control with Indicators, TTL

## Electromechanical Relay Switches Technical Data Sheet

**PE71S6303**

### Features

- SP4T Absorptive Switch
- DC to 22 GHz Operating Frequency Range
- 1 M Cycles min

### Applications

- Test & Measurement
- Communications System
- Instrumentation

### Description

The PE71S6303 is a Single Pole Six Throw Absorptive Switch that operates from DC to 22 GHz. The switch has a normally open actuator and an indicator and 1M life cycles. The switch has an operating voltage of 12 Volts and has TTL control.

### Electrical Specifications

|                    |                          |
|--------------------|--------------------------|
| Switch Type        | SP4T, Absorptive         |
| Actuator Type      | Normally Open            |
| Switching Sequence | Break Before Make        |
| Actuator Options   | Indicators, TTL Logic    |
| TTL Control        | on: "High"<br>off: "Low" |

| Description                    | Minimum | Typical | Maximum | Units |
|--------------------------------|---------|---------|---------|-------|
| Frequency Range                | DC      |         | 22      | GHz   |
| Impedance                      |         | 50      |         | Ohms  |
| Operating Voltage              |         | 12      |         | Volts |
| Actuating Current @ 12 Volts   |         | 380     |         | mA    |
| VSWR                           |         |         | 1.6:1   |       |
| Insertion Loss                 |         |         | 0.6     | dB    |
| Isolation                      | 60      |         |         | dB    |
| Input Power (CW)<br>(@ 22 GHz) |         |         | 20      | Watts |

### Performance by Frequency

| Description         | F1      | F2     | F3      | F4       | F5       | Units |
|---------------------|---------|--------|---------|----------|----------|-------|
| Frequency Range     | DC to 4 | 4 to 8 | 8 to 12 | 12 to 18 | 18 to 22 | GHz   |
| VSWR, Max           | 1.2:1   | 1.3:1  | 1.4:1   | 1.5:1    | 1.6:1    |       |
| Insertion Loss, Max | 0.3     | 0.35   | 0.4     | 0.5      | 0.6      | dB    |
| Isolation, Min      | 75      | 70     | 65      | 60       | 60       | dB    |

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 22 GHz, SMA, 20 Watts, 12V Control with Indicators, TTL PE71S6303](#)



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### Mechanical Specifications

#### Size

|                           |                     |
|---------------------------|---------------------|
| Length                    | 2.13 in [54.1 mm]   |
| Width/Diameter            | 2.13 in [54.1 mm]   |
| Height                    | 2.58 in [65.53 mm]  |
| Weight                    | 0.625 lbs [283.5 g] |
| Body Material and Plating | Aluminum, Gold      |

|                |                  |
|----------------|------------------|
| Operating Life | 1,000,000 Cycles |
| Switching Time | 15 ms Max        |

#### Connectors

|                                           |                            |
|-------------------------------------------|----------------------------|
| RF Connector Type                         | SMA Female                 |
| RF Connector Contact Material and Plating | Beryllium Copper, Gold     |
| RF Connector Body Plating                 | Passivated Stainless Steel |

### Environmental Specifications

#### Temperature

|                 |                  |
|-----------------|------------------|
| Operating Range | -25 to +65 deg C |
|-----------------|------------------|

### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant

### 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: [SP4T Electromechanical Relay Switch DC to 22 GHz, SMA, 20 Watts, 12V Control with Indicators, TTL PE71S6303](#)

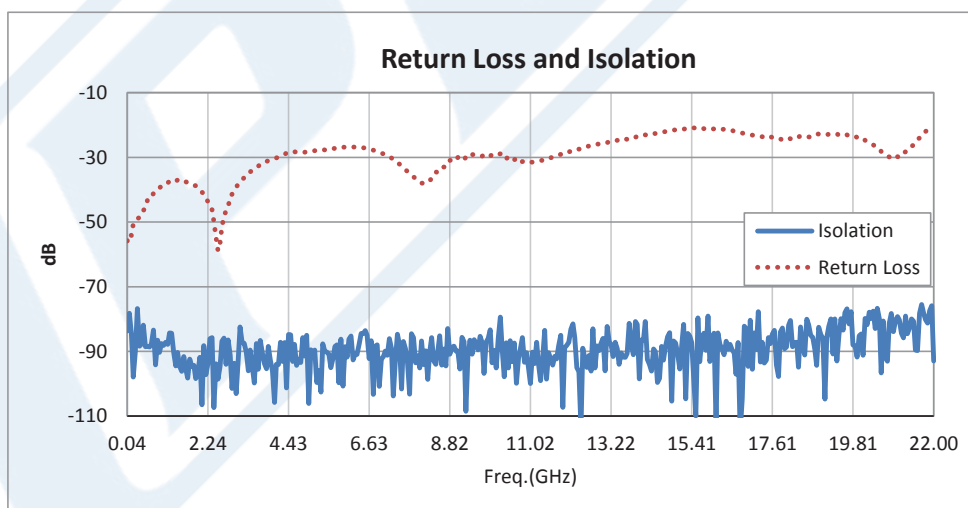
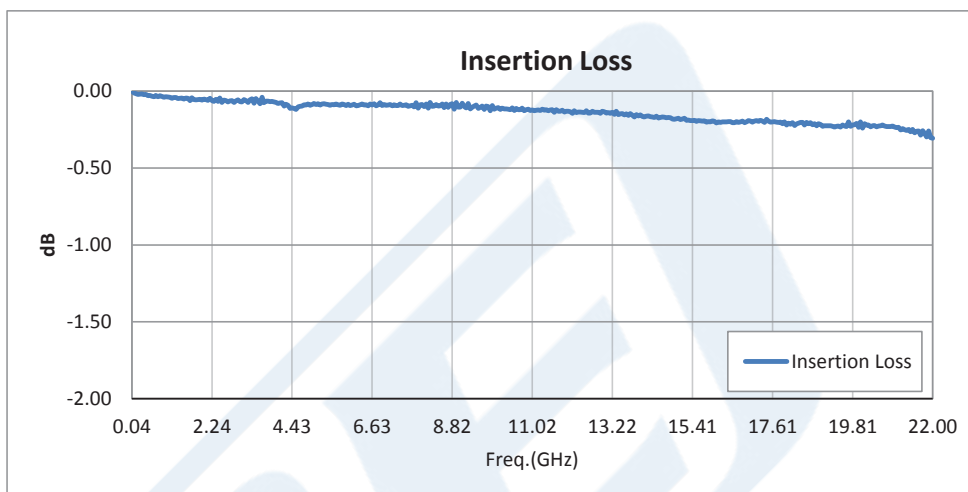


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### Typical Performance Data



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## Electromechanical Relay Switches Technical Data

**PE71S6303**

SP4T Electromechanical Relay Switch DC to 22 GHz, SMA, 20 Watts, 12V Control with 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.

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 22 GHz, SMA, 20 Watts, 12V Control with Indicators, TTL PE71S6303](http://www.pasternack.com/sma-sp4t-electromechanical-relay-switch-22-ghz-indicators-ttl-logic-pe71s6303-p.aspx)

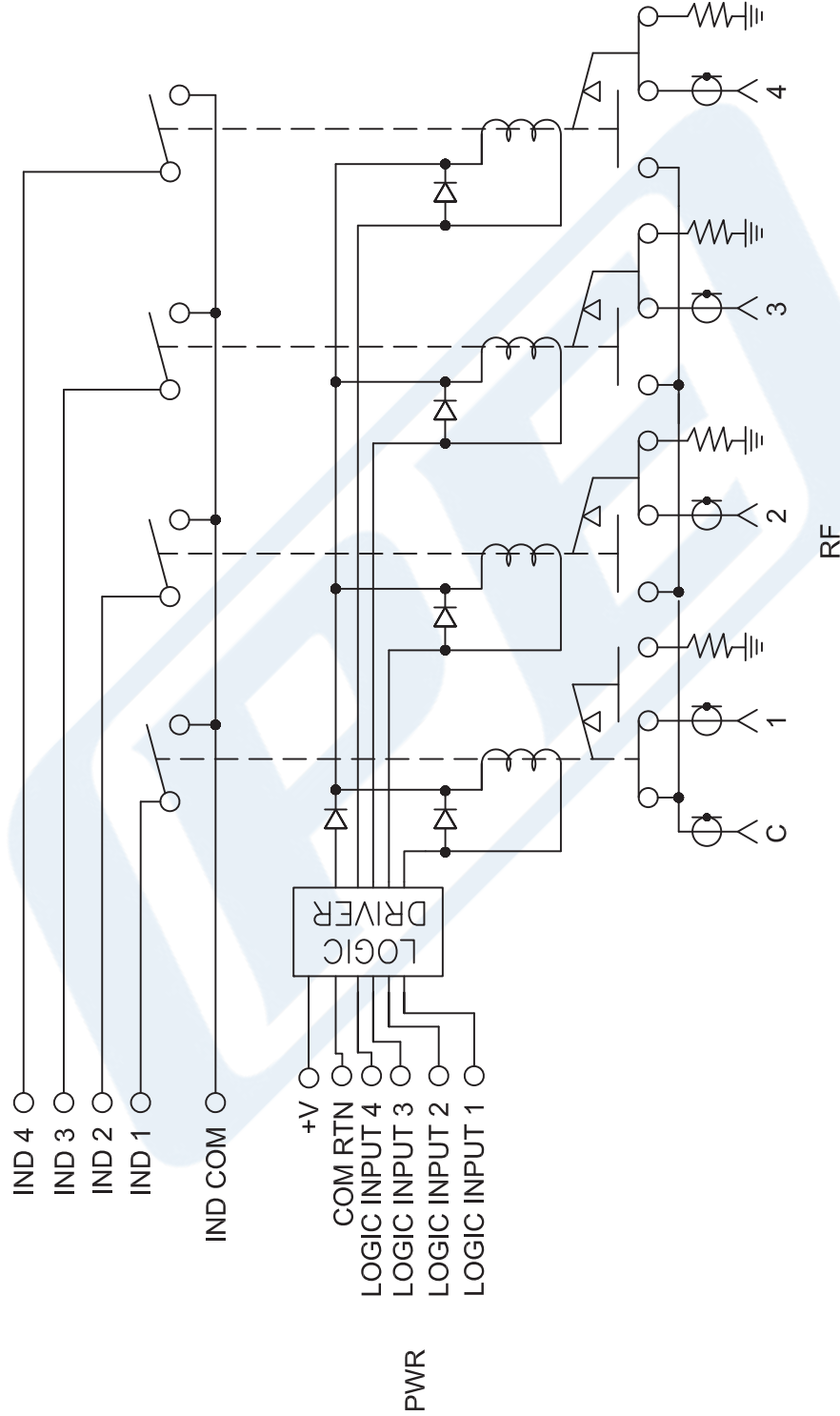
URL: <http://www.pasternack.com/sma-sp4t-electromechanical-relay-switch-22-ghz-indicators-ttl-logic-pe71s6303-p.aspx>

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.



# PE71S6303 CAD Drawing

SP4T Electromechanical Relay Switch DC to 22 GHz, SMA,  
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SCHEMATIC NORMALLY OPEN SHOWN IN DE-ENERGIZED POSITION

DWG TITLE

**PE71S6303**

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].

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FSCM NO. 53919

CAD FILE 090115

SCALE N/A

SIZE A

2233