



SP4T Electromechanical Relay Normally Open Switch DC to 40 GHz, 2.92mm, 3 Watts, 28V Control, Indicators, TTL, Diodes

Electromechanical Relay Switches Technical Data Sheet

PE71S6137

Features

- Single Pole Four Throw Relay Switch
- DC to 40 GHz Frequency Range
- 1M Cycle Min Operating Life
- Normally Open Actuator
- TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.9 dB max
- Isolation 50 dB min
- 3 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation
- Suitable for Aircraft

Description

The PE71S6137 is a Single Pole Four Throw Electromechanical Relay Switch that operates from DC to 40 GHz and has a rating of 3 Watts input power (CW) in a Break Before Make condition. The design features a Normally Open Actuator with TTL Logic Driver, Position Indicators, Suppression Diodes and is rated for 1M Life Cycles for high reliability operation. Insertion loss is specified from 0.2 dB max and Isolation from 70 dB min, with +28 Vdc operating voltage and performance is guaranteed over -35°C to +85°C. The package interface uses solder terminals and 2.92mm Female connectors.

Electrical Specifications

| | |
|--------------------|---|
| Switch Type | SP4T, Reflective |
| Actuator Type | Normally Open |
| Switching Sequence | Break Before Make |
| Actuator Options | Indicators, TTL Logic, Diodes |
| TTL Control | on: 2.4 to 5 Volts off: 0 to 0.8 Volts |

| Description | Minimum | Typical | Maximum | Units |
|---------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 40 | GHz |
| Impedance | | 50 | | Ohms |
| Operating Voltage | 24 | 28 | 30 | Volts |
| Actuating Current @ 28 Volts | | | 200 | mA |
| VSWR | | | 2:1 | |
| Insertion Loss | | | 0.9 | dB |
| Isolation | 50 | | | dB |
| Input Power (CW) (at 40 GHz) | | | 3 | Watts |

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 Normally Open Switch DC to 40 GHz, 2.92mm, 3 Watts, 28V Control, Indicators, TTL, Diodes PE71S6137](#)



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Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---------------------|---------|---------|----------|------------|------------|-------|
| Frequency Range | DC to 6 | 6 to 12 | 12 to 18 | 18 to 26.5 | 26.5 to 40 | 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

Size

Length 2.25 in [57.15 mm]

Width/Diameter 1.75 in [44.45 mm]

Height 1.75 in [44.45 mm]

Weight 0.254 lbs [115.21 g]

Body Material and Plating Aluminum

Package Type Connectorized Module

Operating Life 1,000,000 Cycles

Switching Time 15 ms Max

Connectors

RF Connector Type 2.92mm Female

RF Connector Contact Material and Plating Beryllium Copper, Gold

RF Connector Body Material and Plating Passivated Stainless Steel

Control Connector Solder Pin

Environmental Specifications

Temperature

Operating Range -35 to +85 deg C

ESD Sensitivity ESD Sensitive Material. Transport material in Approved ESD bags. Handle in approved ESD Workstation.



Environmental Specification Notes:
Designed to meet MIL-E-5400 and MIL-S-3928

Compliance Certifications (visit www.Pasternack.com for current document)

Not RoHS Compliant

Plotted and Other Data

Notes:

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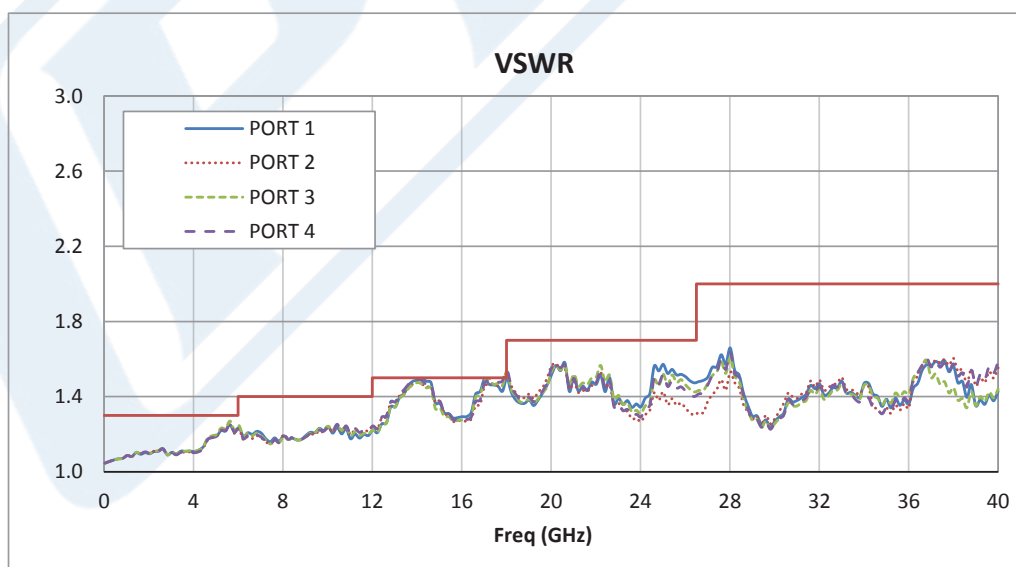
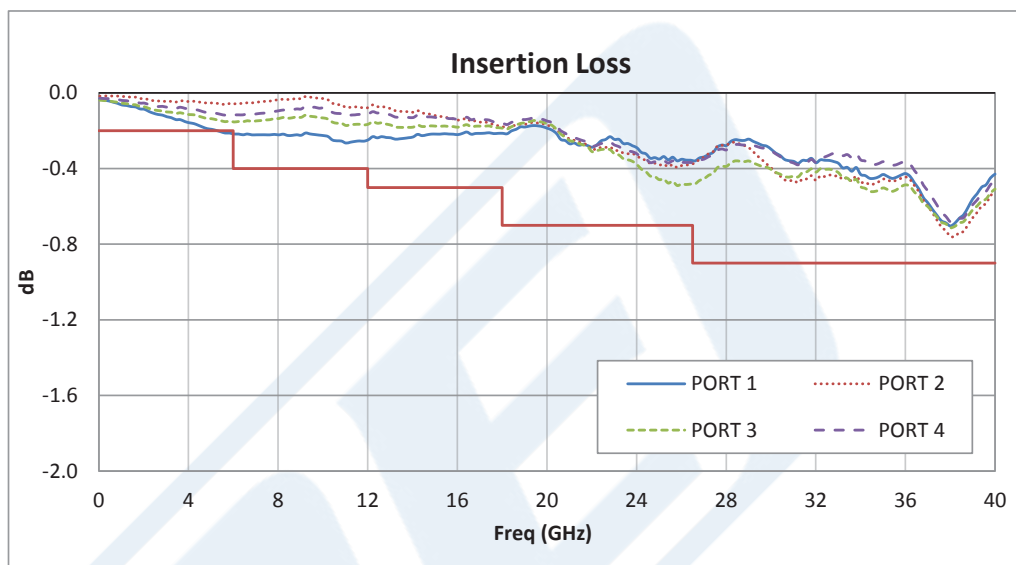


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Typical Performance Data



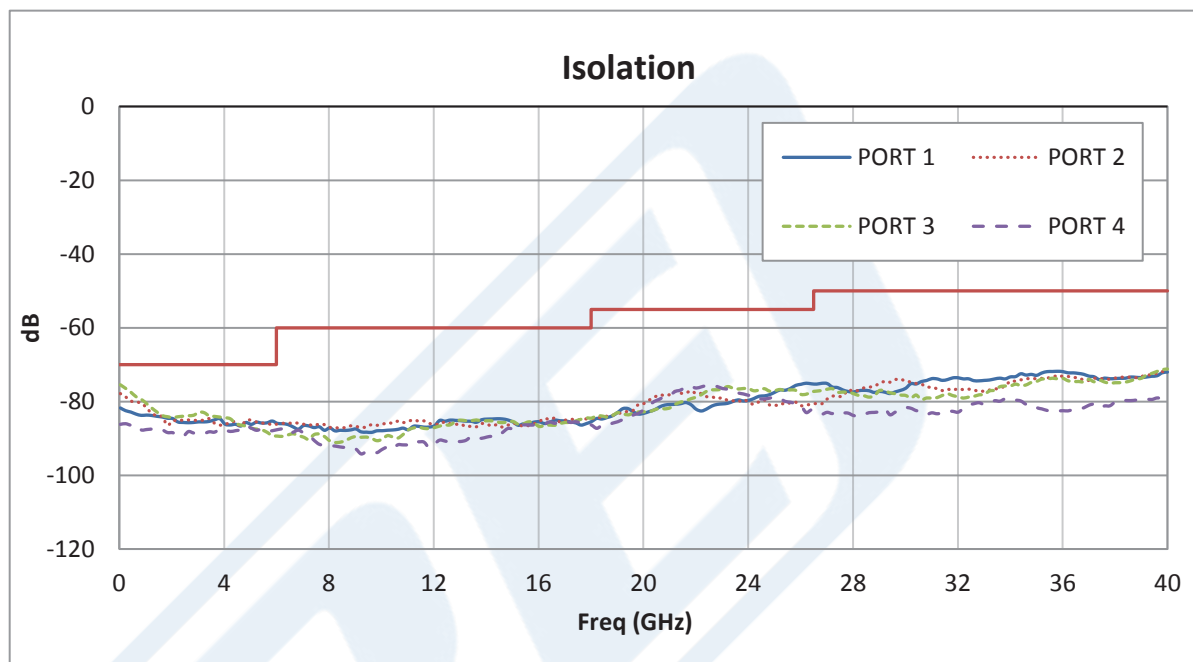
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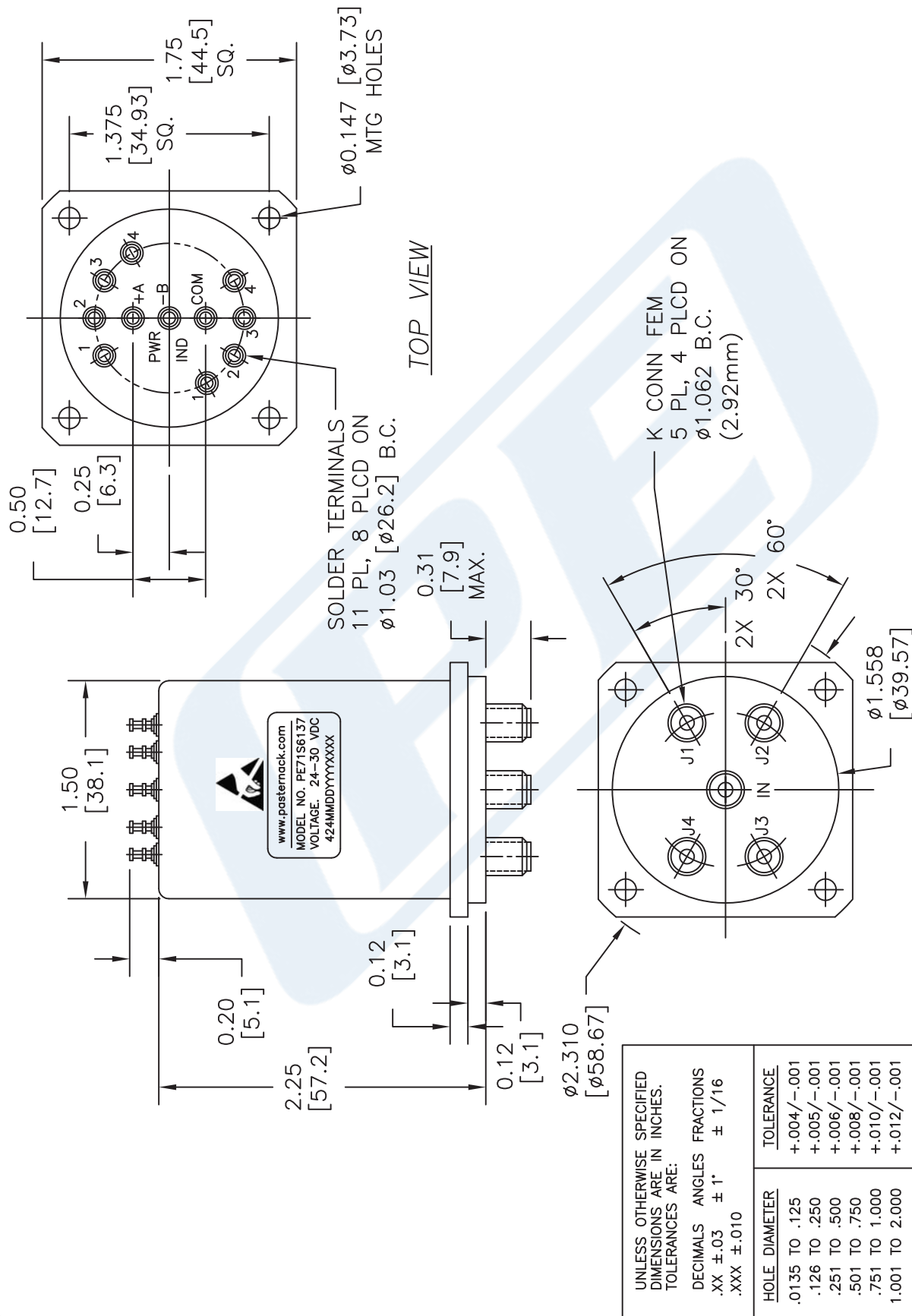
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NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES (mm).

DWG TITLE
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FSCM NO. 53919

CAD FILE 031115

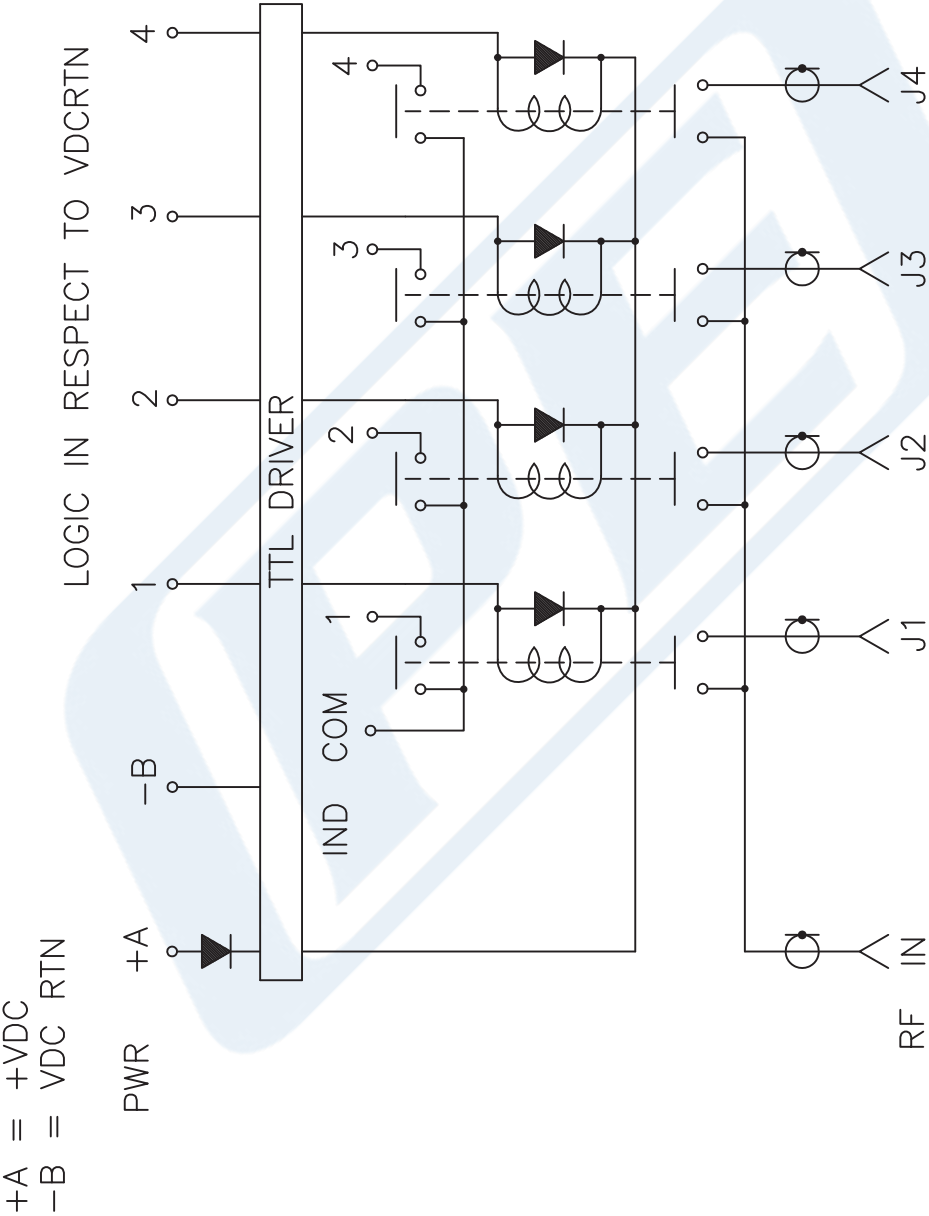
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SIZE A

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PE71S6137 CAD Drawing

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SCHEMATIC SHOWN IN DE-ENERGIZED POSITION

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