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# SPDT Electromechanical Relay Latching Switch DC to 26.5 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Self Cut Off, Diodes

## Electromechanical Relay Switches Technical Data Sheet PE71S6101

### Features

- Single Pole Double Throw Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Min Operating Life
- Latching Actuator
- Self Cut Off, TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.5 dB max
- Isolation 50 dB min
- 20 Watts Avg Power Max
- Switching Sequence Break Before Make

### Applications

- Test & Measurement
- Communications System
- Instrumentation

### Description

The PE71S6101 is a Single Pole Double Throw Electromechanical Relay Switch that operates from DC to 26.5 GHz and has a rating of 20 Watts input power (CW) in a Break Before Make condition. The design features a Latching Actuator with Self Cut Off circuitry, 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 80 dB min, with +28 Vdc operating voltage. Performance is guaranteed over -25°C to +85°C and the switch assembly is RoHS compliant. The package interface uses solder terminals and SMA Female connectors.

### Electrical Specifications

| | |
|---|---|
| Switch Type | SPDT, Reflective |
| Actuator Type | Latching |
| Switching Sequence | Break Before Make |
| Actuator Options | Indicators, TTL Logic, Self Cut Off, Diodes |
| TTL Control | on: 2.4 to 5 Volts<br>off: 0 to 0.8 Volts |

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 26.5 | GHz |
| Impedance | | 50 | | Ohms |
| Operating Voltage | | 28 | | Volts |
| Actuating Current @ 28 Volts | | 95 | | mA |
| VSWR | | | 1.5:1 | |
| Insertion Loss | | | 0.5 | dB |
| Isolation | 50 | | | dB |
| Input Power (CW)<br>(at 26.5 GHz) | | | 20 | Watts |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SPDT Electromechanical Relay Latching Switch DC to 26.5 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Self Cut Off, Diodes PE71S6101

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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## Electromechanical Relay Switches Technical Data PE71S6101

**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 26.5 | GHz |
| VSWR, Max | 1.25:1 | 1.25:1 | 1.3:1 | 1.35:1 | 1.5:1 | |
| Insertion Loss, Max | 0.2 | 0.25 | 0.3 | 0.4 | 0.5 | dB |
| Isolation, Min | 80 | 75 | 70 | 60 | 50 | dB |

### Mechanical Specifications

**Size**

| | |
|---|---|
| Length | 1.83 in [46.48 mm] |
| Width/Diameter | 1.27 in [32.26 mm] |
| Height | 0.5 in [12.7 mm] |
| Weight | 0.148 lbs [67.13 g] |
| Body Material and Plating | Aluminum |
| Package Type | Connectorized Module |
| Operating Life | 1,000,000 Cycles |
| Switching Time | 20 ms Max |

**Connectors**

| | |
|---|---|
| RF Connector Type | SMA 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 | -25 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-DTL-3928

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

RoHS Compliant

### Plotted and Other Data

Notes:

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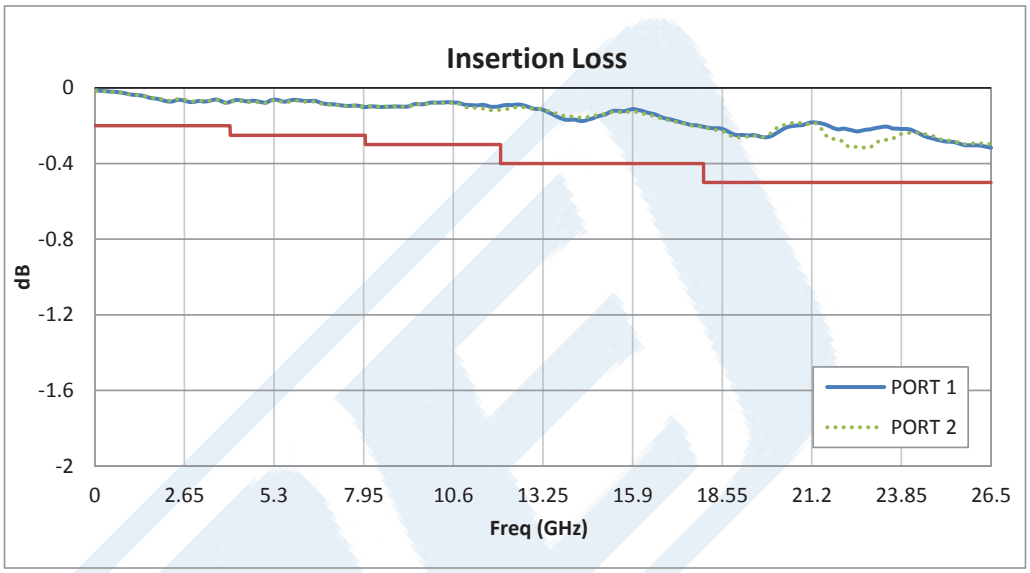
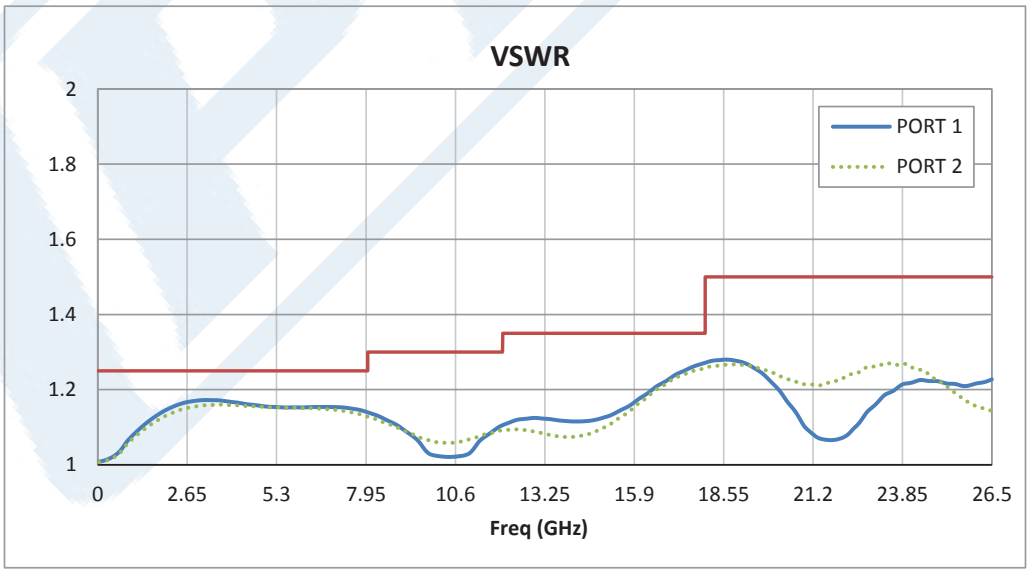
## Electromechanical Relay Switches Technical Data — PE71S6101

**Typical Performance Data**

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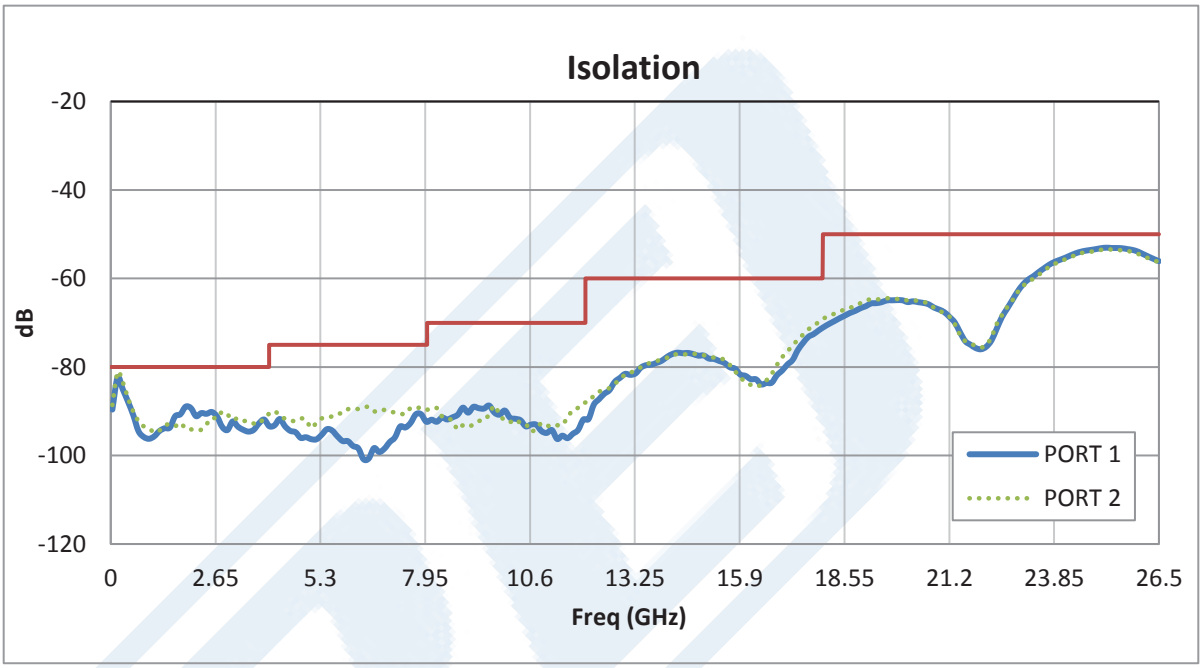


SPDT Electromechanical Relay Latching Switch DC to 26.5 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Self Cut Off, Diodes from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/sma-spdt-electromechanical-relay-switch-26.5-ghz-indicators-latching-pe71s6101-p.aspx



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# PE71S6101 CAD Drawing

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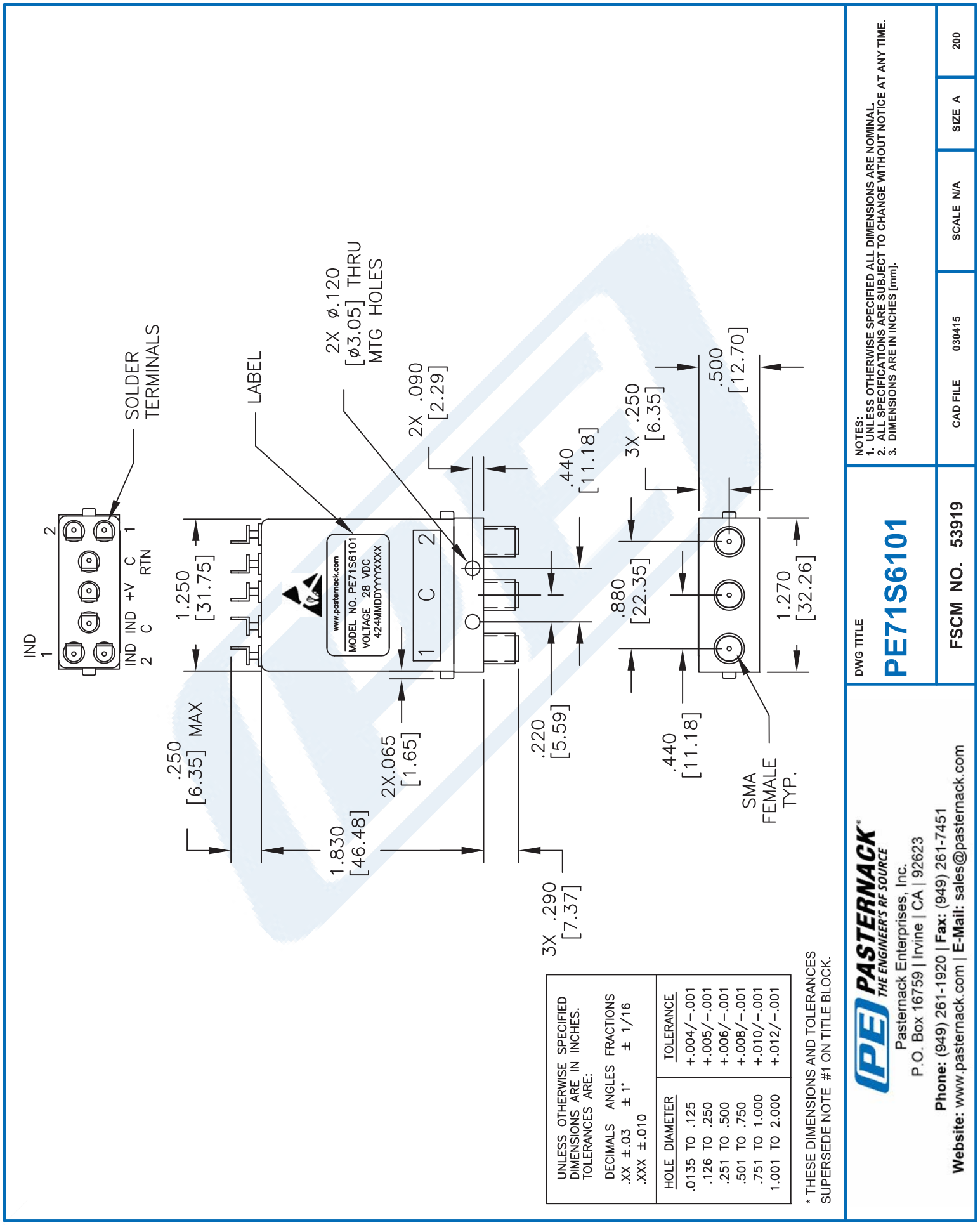


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

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: PE71S6101

CAD FILE 030415 | SCALE N/A | SIZE A | 200

FSCM NO. 53919


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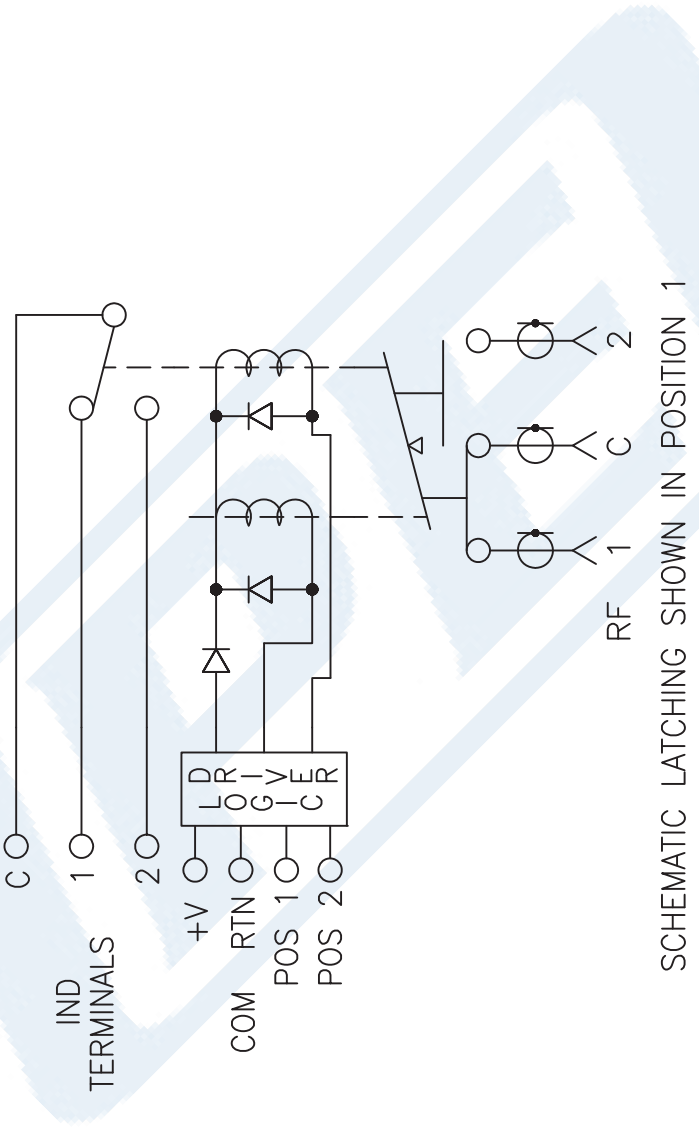


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