



SPDT Electromechanical Relay Failsafe Switch DC to 26.5 GHz, SMA, 20 Watts, 12V Control

Electromechanical Relay Switches Technical Data Sheet

PE71S6094

Features

- Single Pole Double Throw Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Min Operating Life
- Failsafe Actuator
- 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 PE71S6094 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 Failsafe Actuator 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 +12 Vdc operating voltage. Performance is guaranteed over -55°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: Failsafe
 Switching Sequence: Break Before Make

| Description | Minimum | Typical | Maximum | Units |
|-----------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 26.5 | GHz |
| Impedance | | 50 | | Ohms |
| Operating Voltage | | 12 | | Volts |
| Actuating Current @ 12 Volts | | 300 | | mA |
| VSWR | | | 1.5:1 | |
| Insertion Loss | | | 0.5 | dB |
| Isolation | 50 | | | dB |
| Input Power (CW) (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 Failsafe Switch DC to 26.5 GHz, SMA, 20 Watts, 12V Control PE71S6094](#)





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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 | 1.25 in [31.75 mm] |
| Width/Diameter | 1.27 in [32.26 mm] |
| Height | 0.5 in [12.7 mm] |
| Weight | 0.14 lbs [63.5 g] |
| Body Material and Plating | Aluminum |
| Package Type | Connectorized Module |
| Operating Life | 1,000,000 Cycles |
| Switching Time | 35 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 | -55 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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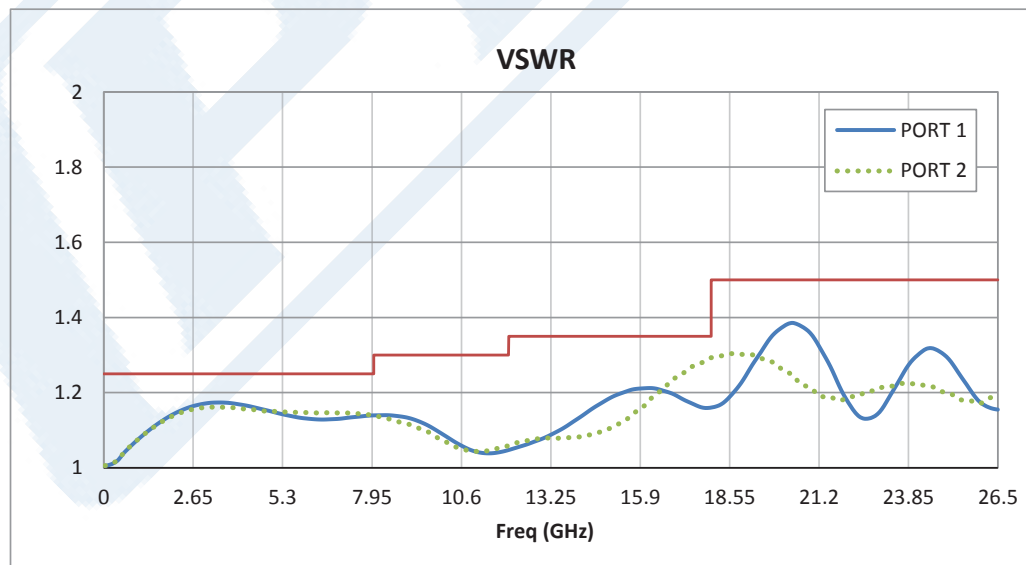
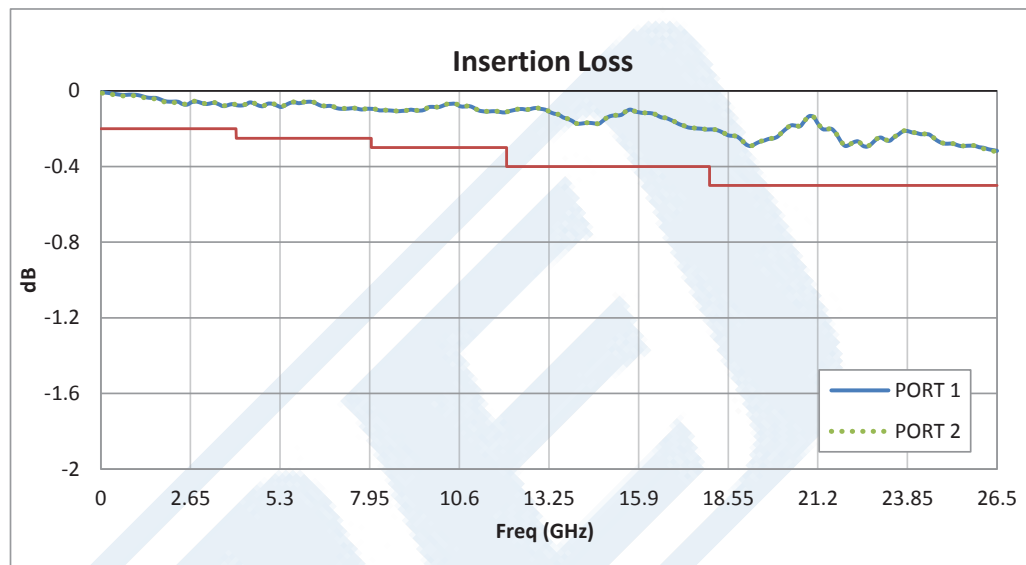


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Typical Performance Data



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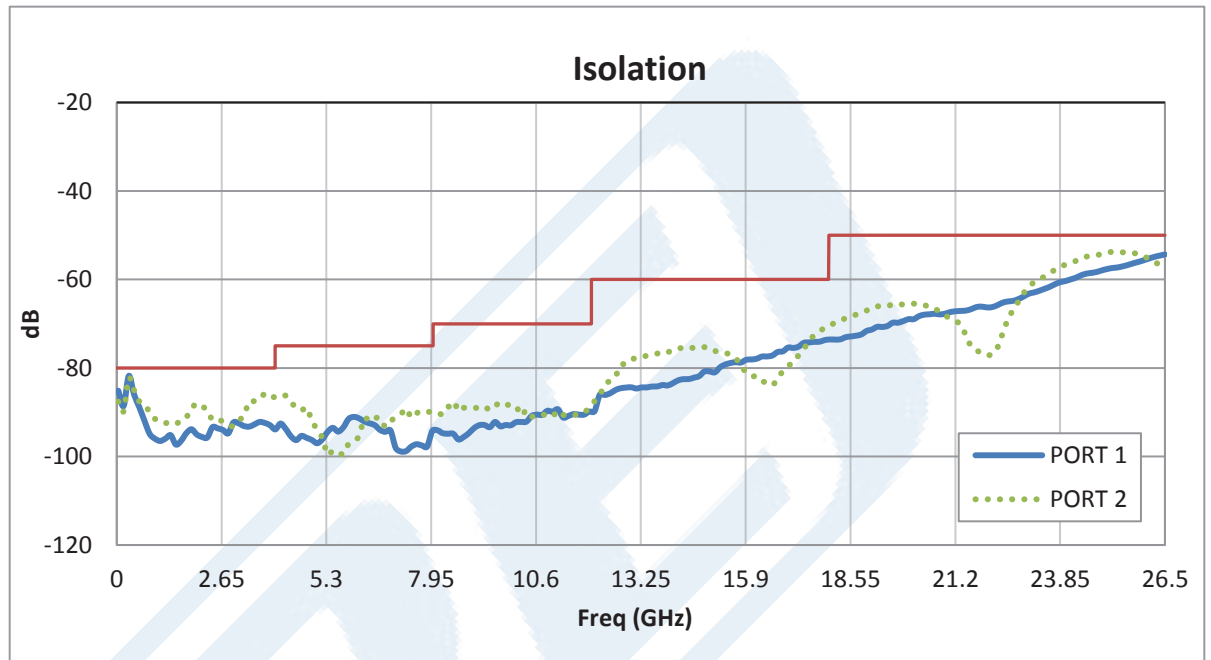




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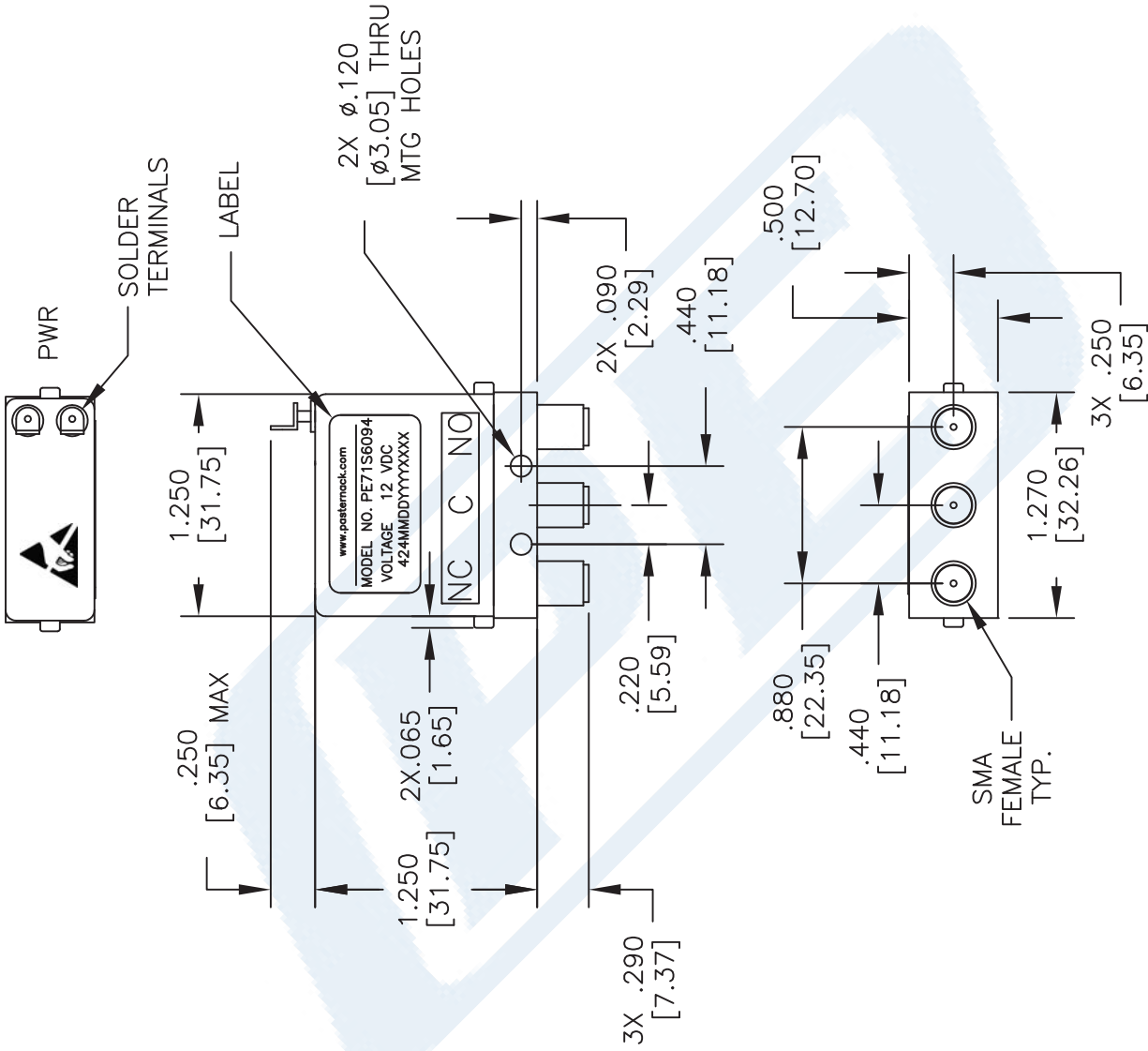
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

PE71S6094 CAD Drawing

SPDT Electromechanical Relay Failsafe Switch DC to
26.5 GHz, SMA, 20 Watts, 12V Control



| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: | | TOLERANCE | |
|----------------------------------------------------------------------|--------|----------------|-----------------|
| DECIMALS | ANGLES | HOLE DIAMETER | |
| .XX ±.03 | ± 1° | .0135 TO .125 | + .004 / - .001 |
| .XXX ±.010 | | .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.



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DWG TITLE

PE71S6094

FSCM NO. 53919

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).

CAD FILE 030415

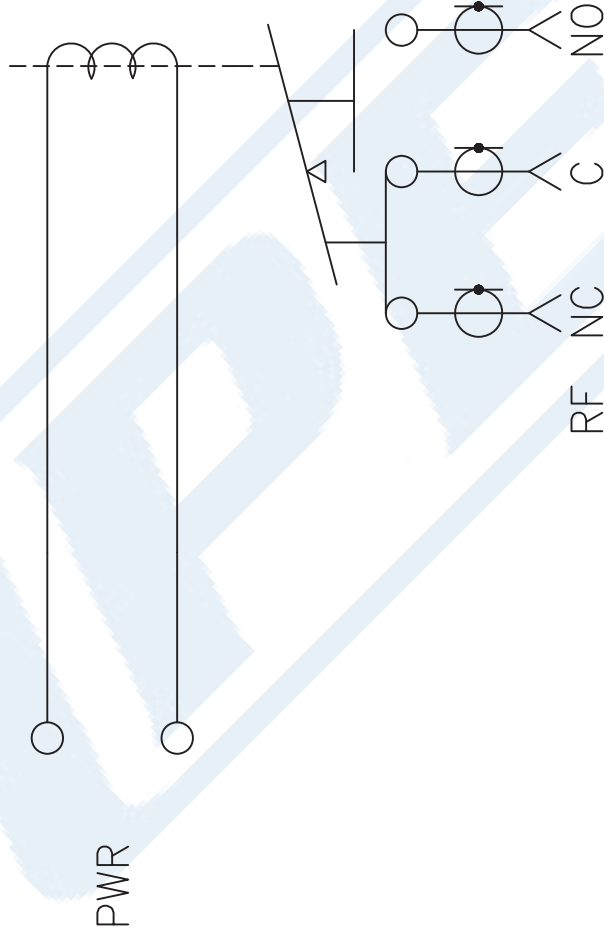
SCALE N/A

SIZE A

200

PE71S6094 CAD Drawing

SPDT Electromechanical Relay Failsafe Switch DC to
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SCHEMATIC FAILSAFE SHOWN IN NORMALLY CLOSED POSITION

DWG TITLE

PE71S6094

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CAD FILE 030415

SCALE N/A

SIZE A

200



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