



Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control

Electromechanical Relay Switches Technical Data Sheet

PE71S6175

Features

- Transfer Relay Switch
- DC to 12.4 GHz Frequency Range
- 1M Cycle Min Operating Life
- Failsafe Actuator
- Insertion Loss 0.4 dB max
- Isolation 60 dB min
- 160 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation

Description

The PE71S6175 is a Transfer Electromechanical Relay Switch that operates from DC to 12.4 GHz and has a rating of 160 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 +28 Vdc operating voltage and performance is guaranteed over -25°C to +65°C. The package interface uses solder terminals and N Female connectors.

Electrical Specifications

| | |
|--------------------|----------------------|
| Switch Type | Transfer, Reflective |
| Actuator Type | Failsafe |
| Switching Sequence | Break Before Make |

| Description | Minimum | Typical | Maximum | Units |
|-----------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 12.4 | GHz |
| Impedance | | 50 | | Ohms |
| Operating Voltage | | 28 | | Volts |
| Actuating Current @ 28 Volts | | 260 | | mA |
| VSWR | | | 1.45:1 | |
| Insertion Loss | | | 0.4 | dB |
| Isolation | 60 | | | dB |
| Input Power (CW) (at 12.4 GHz) | | | 160 | Watts |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control PE71S6175](#)



Transfer Electromechanical Relay Failsafe Switch
DC to 12.4 GHz, N, 160 Watts, 28V Control

Electromechanical Relay Switches Technical Data

PE71S6175

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---------------------|---------|--------|-----------|----|----|-------|
| Frequency Range | DC to 4 | 4 to 8 | 8 to 12.4 | | | GHz |
| VSWR, Max | 1.2:1 | 1.3:1 | 1.45:1 | | | |
| Insertion Loss, Max | 0.2 | 0.3 | 0.4 | | | dB |
| Isolation, Min | 80 | 70 | 60 | | | dB |

Mechanical Specifications

Size

| | |
|---------------------------|-----------------------|
| Length | 2.06 in [52.32 mm] |
| Width/Diameter | 2 in [50.8 mm] |
| Height | 2 in [50.8 mm] |
| Weight | 0.8625 lbs [391.22 g] |
| Body Material and Plating | Aluminum |
| Package Type | Connectorized Module |
| Operating Life | 1,000,000 Cycles |
| Switching Time | 50 ms Max |

Connectors

| | |
|---|----------------------------|
| RF Connector Type | N 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 +65 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)

Not 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: [Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control PE71S6175](#)

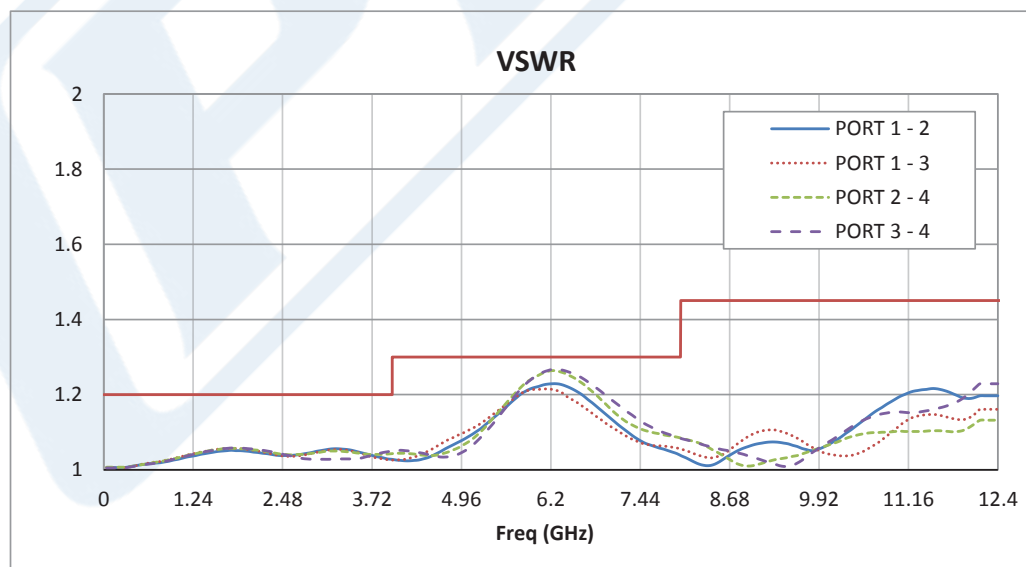
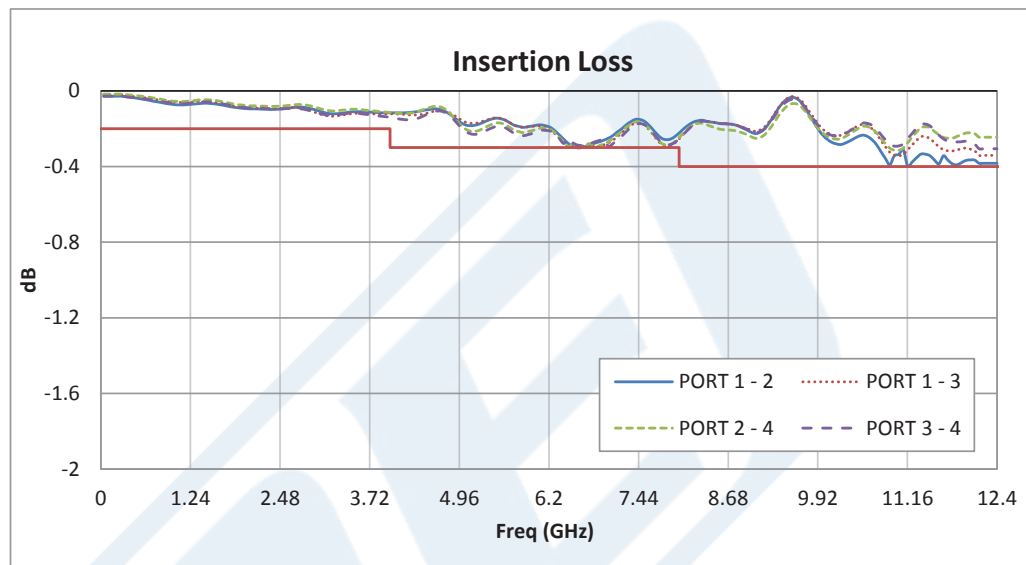


Transfer Electromechanical Relay Failsafe Switch
DC to 12.4 GHz, N, 160 Watts, 28V Control

Electromechanical Relay Switches Technical Data

PE71S6175

Typical Performance Data



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control PE71S6175](#)

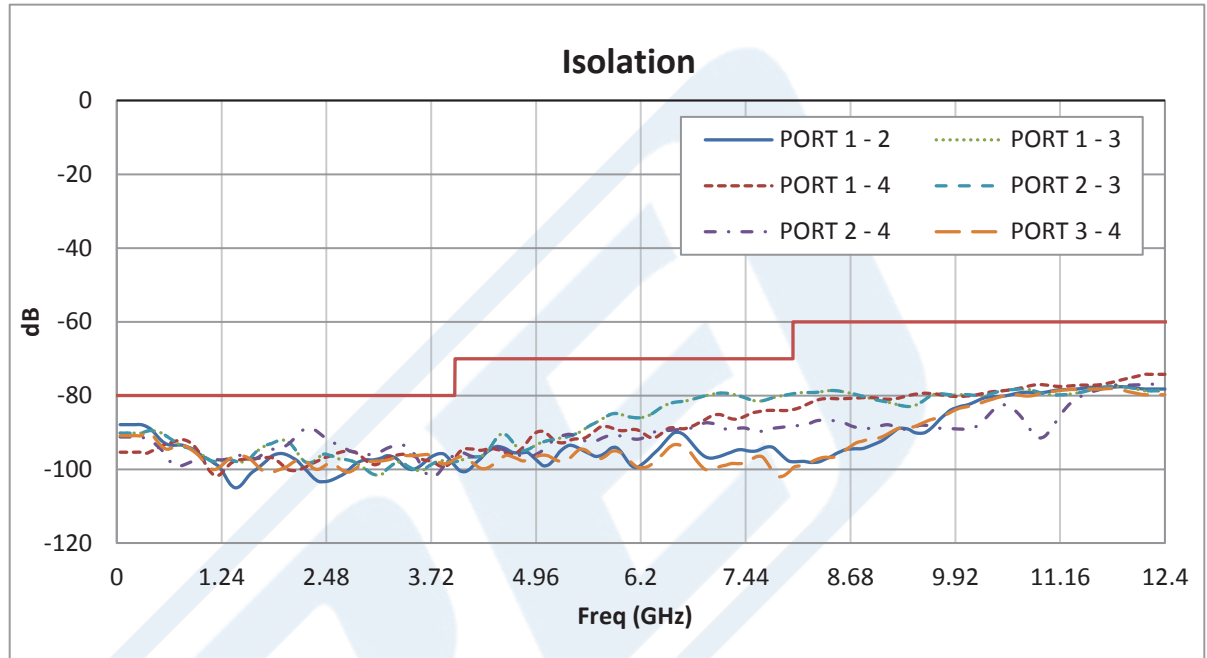




Transfer Electromechanical Relay Failsafe Switch
DC to 12.4 GHz, N, 160 Watts, 28V Control

Electromechanical Relay Switches Technical Data

PE71S6175



Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control 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: [Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 160 Watts, 28V Control PE71S6175](http://www.pasternack.com/n-transfer-electromechanical-relay-switch-12.4-ghz-failsafe-pe71s6175-p.aspx)

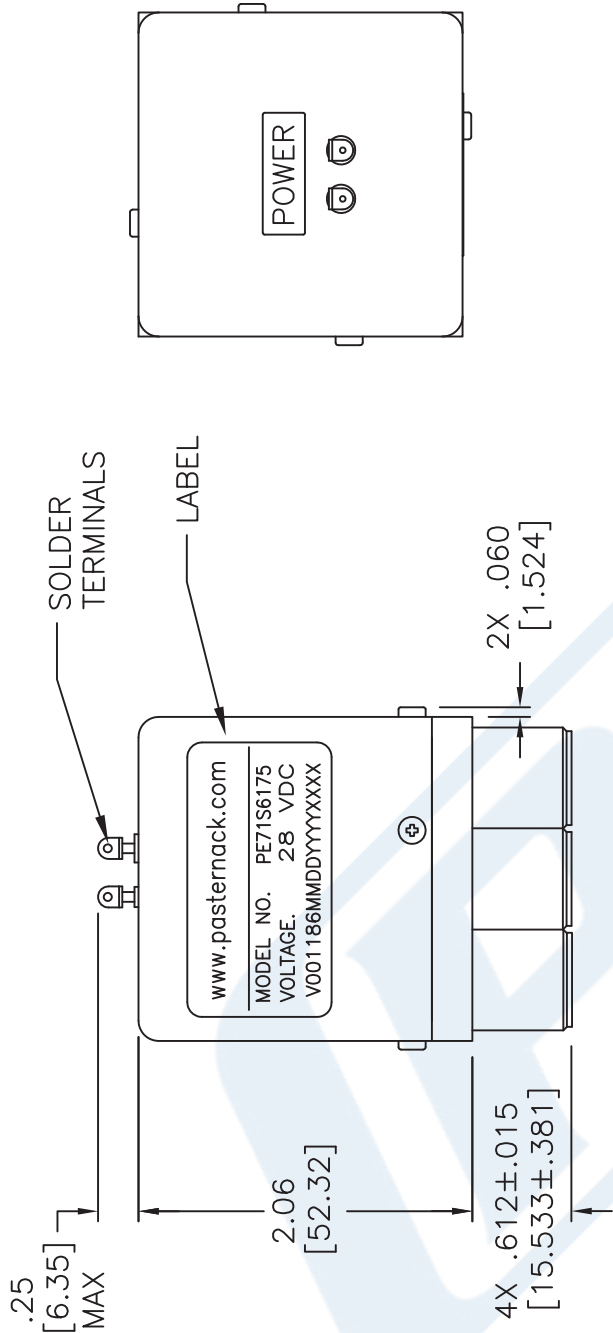
URL: <http://www.pasternack.com/n-transfer-electromechanical-relay-switch-12.4-ghz-failsafe-pe71s6175-p.aspx>

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.



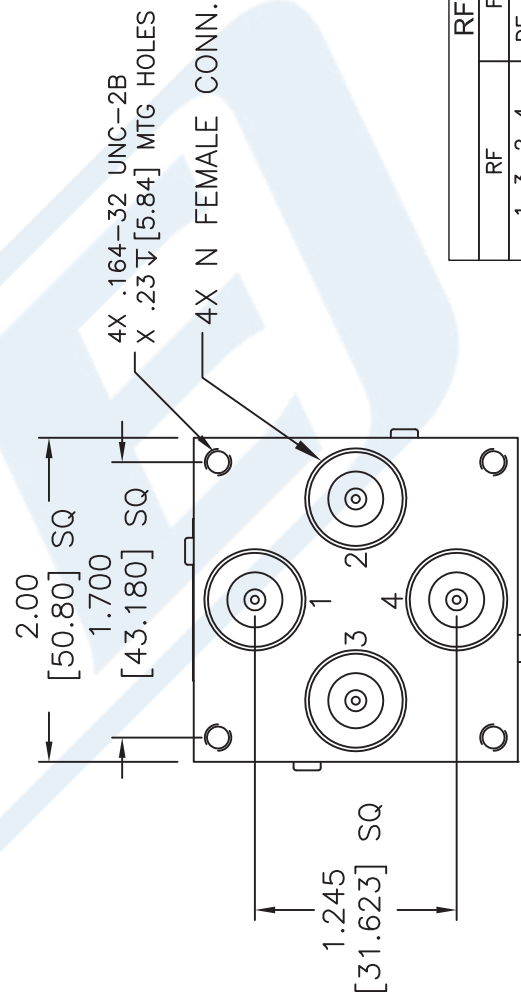
PE71S6175 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC
to 12.4 GHz, N, 160 Watts, 28V Control



| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: | | ANGLES | |
|--|-------------------------------------|--------|-----------|
| DECIMALS | .XX ± .03 (0.76) | ±1° | FRACTIONS |
| | .XXX ± .010 (0.254) | ±1/16 | |
| HOLE DIAMETER | TOLERANCE | | |
| .0135 TO .125 (0.343 TO 3.175) | +0.004 TO -0.001 (+0.102 TO -0.025) | | |
| .126 TO .250 (3.200 TO 6.350) | +0.005 TO -0.001 (+0.127 TO -0.025) | | |
| .251 TO .500 (6.375 TO 12.700) | +0.006 TO -0.001 (+0.152 TO -0.025) | | |
| .501 TO .750 (12.725 TO 19.050) | +0.008 TO -0.001 (+0.203 TO -0.025) | | |
| .751 TO 1.000 (19.075 TO 25.400) | +0.010 TO -0.001 (+0.254 TO -0.025) | | |
| 1.001 TO 2.000 (25.425 TO 50.800) | +0.012 TO -0.001 (+0.305 TO -0.025) | | |

* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.



| RF STATUS | |
|-----------|--------------|
| RF | FAILSAFE |
| 1-3, 2-4 | DE-ENERGIZED |
| 1-2, 3-4 | ENERGIZED |
| | LATCHING |
| | POSITION 1 |
| | POSITION 2 |

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
PE71S6175

PE PASTERNAK
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 042715

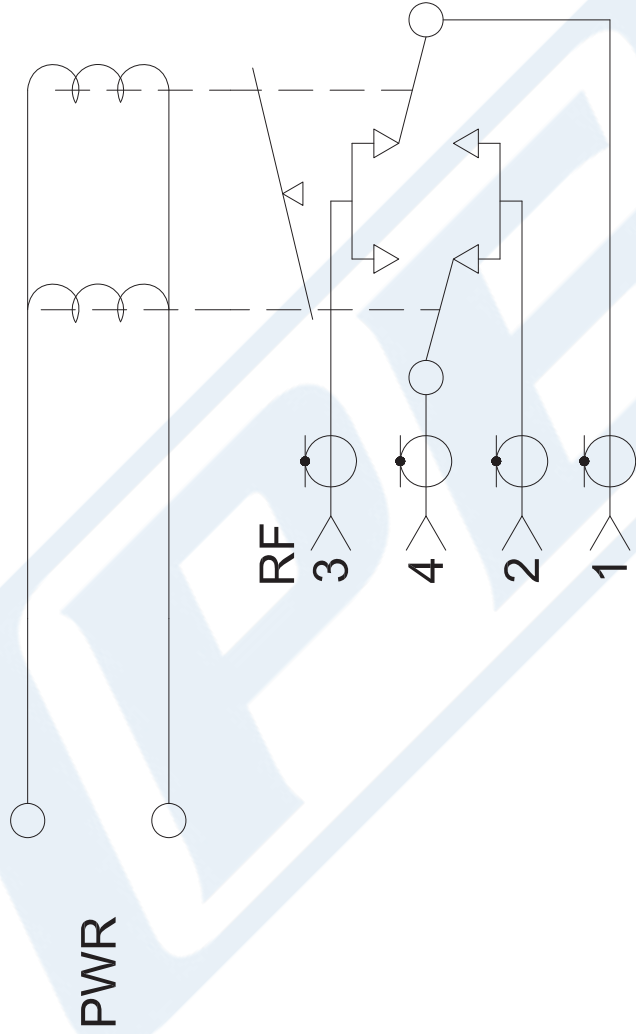
SCALE N/A

SIZE A

2233

PE71S6175 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC
to 12.4 GHz, N, 160 Watts, 28V Control



SCHEMATIC FAILSAFE SHOWN IN DE-ENERGIZED POSITION

DWG TITLE

PE71S6175

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].

FSCM NO. 53919

CAD FILE 042715

SCALE N/A

SIZE A

2233



Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com