



## **Electromechanical Relay Switches Technical Data Sheet**

PE71S6169

#### **Features**

- Transfer Relay Switch
- DC to 12.4 GHz Frequency Range
- 1M Cycle Min Operating Life
- · Failsafe Actuator
- TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.4 dB max
- Isolation 60 dB min
- 50 Watts Avg Power Max
- · Switching Sequence Break Before Make

### **Applications**

- Test & Measurement
- · Communications System
- Instrumentation

#### **Description**

The PE71S6169 is a Transfer Electromechanical Relay Switch that operates from DC to 12.4 GHz and has a rating of 50 Watts input power (CW) in a Break Before Make condition. The design features a Failsafe 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 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
Actuator Type
Switching Sequence
Actuator Options
TTL Control

Transfer, Reflective Failsafe Break Before Make Indicators, TTL Logic, Diodes on: 2.4 to 5 Volts off: 0 to 0.8 Volts

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

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, 50 Watts, 28V Control, Indicators, TTL, Diodes PE71S6169

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

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#### **Performance by Frequency**

| F1      | F2                      | F3                                       | F4                                                                                          | F5                                                        | Units                                                     |
|---------|-------------------------|------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| DC to 4 | 4 to 8                  | 8 to 12.4                                |                                                                                             |                                                           | GHz                                                       |
| 1.2:1   | 1.3:1                   | 1.45:1                                   |                                                                                             |                                                           |                                                           |
| 0.2     | 0.3                     | 0.4                                      |                                                                                             |                                                           | dB                                                        |
| 80      | 70                      | 60                                       |                                                                                             |                                                           | dB                                                        |
|         | DC to 4<br>1.2:1<br>0.2 | DC to 4 4 to 8<br>1.2:1 1.3:1<br>0.2 0.3 | DC to 4     4 to 8     8 to 12.4       1.2:1     1.3:1     1.45:1       0.2     0.3     0.4 | DC to 4 4 to 8 8 to 12.4  1.2:1 1.3:1 1.45:1  0.2 0.3 0.4 | DC to 4 4 to 8 8 to 12.4  1.2:1 1.3:1 1.45:1  0.2 0.3 0.4 |

#### **Mechanical Specifications**

Size

Length

Width/Diameter

Height

Weight

Body Material and Plating

Package Type

Operating Life

Switching Time

#### **Connectors**

RF Connector Type

RF Connector Contact Material and Plating

RF Connector Body Material and Plating

**Control Connector** 

#### **Environmental Specifications**

Temperature

Operating Range

ESD Sensitivity

2.06 in [52.32 mm] 2 in [50.8 mm] 2 in [50.8 mm]

0.875 lbs [396.89 g]

Aluminum

Connectorized Module

1,000,000 Cycles

50 ms Max

N Female

Beryllium Copper, Gold

Passivated Stainless Steel

Solder Pin

-25 to +65 deg C

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:

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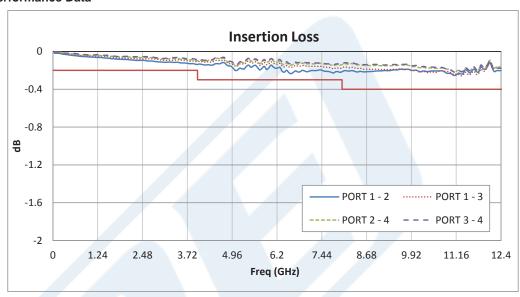


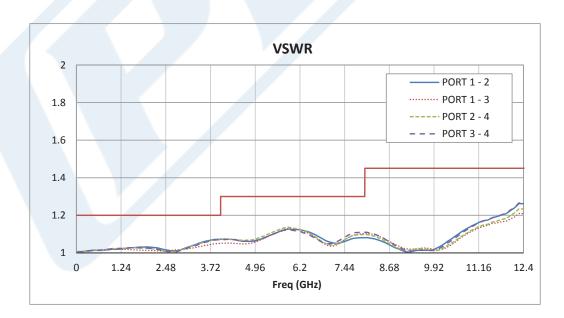


### **Electromechanical Relay Switches Technical Data**

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#### **Typical Performance Data**





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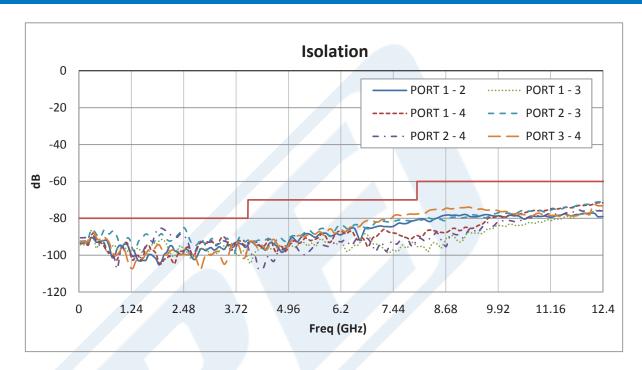
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Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 50 Watts, 28V Control, Indicators, TTL, Diodes from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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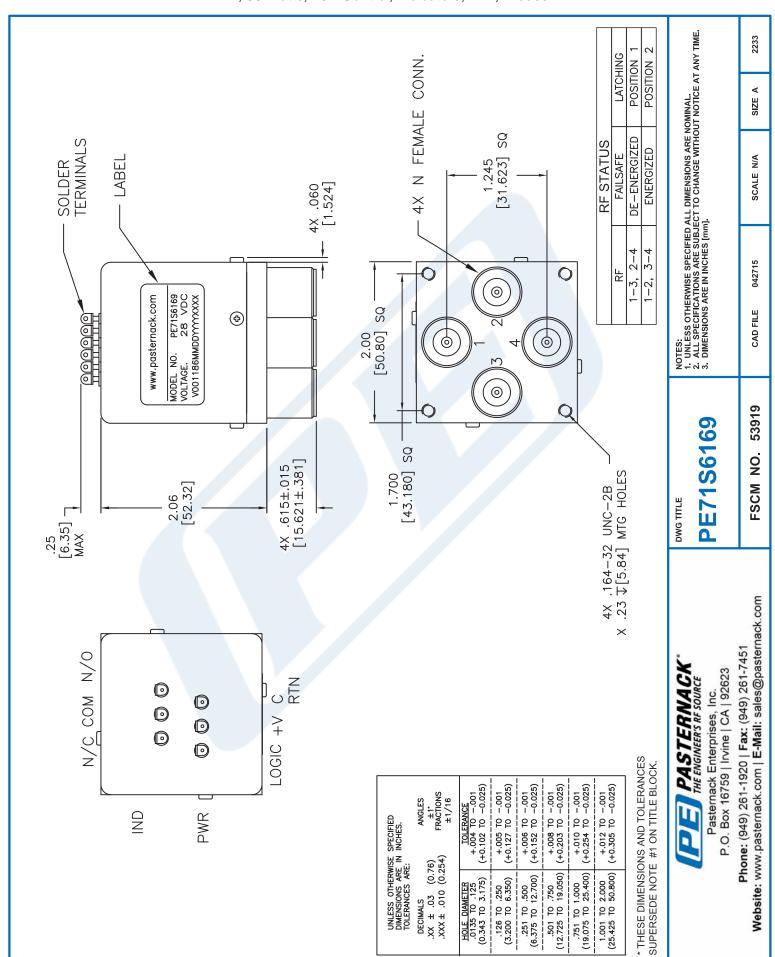
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## PE71S6169 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC to 12.4 GHz, N, 50 Watts, 28V Control, Indicators, TTL, Diodes



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