



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

PE71S6057

## **Features**

- Single Pole Double Throw Relay Switch
- DC to 40 GHz Frequency Range
- 10M Cycle Min Operating Life
- 10 Watt Avg Power Max

- -40 to +85 Deg C Operating Temperature
- Insertion Loss 0.8 dB Max
- VSWR 1.9:1 Max

## **Applications**

- High Performance Relay Switch
- Military Communications
- · Communications Systems
- Test & Measurement

#### **Description**

The PE71S6057 is a Single Pole Double Throw Electromechanical Relay Switch that operates from DC to 40 GHz and can handle up to 80 Watts of CW input power in a Break Before Make condition. The design features a Latching Actuator with Position Indicators and Self Cut Off circuitry and is rated for 10M Life Cycles for high reliability operation. Insertion loss is specified from 0.3 dB max and Isolation from 70 dB min, with +28 Vdc operating voltage. Performance is guaranteed over -40°C to +85°C and the switch assembly is RoHS and REACH compliant. The package interface uses solder terminals and 2.92mm Female connectors.

#### **Electrical Specifications**

Switch Type
Actuator Type
Switching Sequence
Actuator Options
Polarity
Indicator Rating
Self Cut-Off Time

SPDT, Reflective
Latching
Break before Make
Indicators, Self Cut Off
Negative Common
1 Watts / 30 Volts / 100 mA
40 ms < CT < 120 ms

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage	24	28	30	Volts
Actuating Current @ 28 Volts		80		mA
VSWR			1.9:1	
Insertion Loss			0.8	dB
Isolation	50			dB
Input Power (CW)			10	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 40 GHz, 2.92mm, 10 Watts, 30V Indicator, 28V Control with Indicators, Self Cut Off PE71S6057

ISO 9001 : 2008 Registered

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## **Electromechanical Relay Switches Technical Data**

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#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12.4	12.4 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	1.9:1	
Insertion Loss, Max	0.3	0.4	0.5	0.7	0.8	dB
Isolation, Min	70	60	60	55	50	dB
Input Power, Max (CW)	80	60	50	20	10	Watts

**Electrical Specification Notes:** 

Average Power and Actuating Current values at 25°C.

## **Mechanical Specifications**

Size

 Length
 1.5 in [38.1 mm]

 Width/Diameter
 1.5 in [38.1 mm]

 Height
 0.5 in [12.7 mm]

 Weight
 0.1 lbs [45.36 g]

 Package Type
 Connectorized Module

 Operating Life
 10,000,000 Cycles

 Switching Time
 10 ms Max

Connectors

RF Connector Type 2.92mm Female
RF Connector Specification MIL C 39012
Control Connector Solder Pins

Mechanical Specification Notes: Solder Pins: 250°C max/30sec.

#### **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C Storage Range -55 to +85 deg C

Construction Splashproof

Shock MIL-STD-202, Method 213B, Cond.C

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Vibration ESD Sensitivity MIL-STD-202, Method 204D, Cond.D ESD Sensitive Material. Transport material in approved ESD bags. Handle in approved ESD Workstation.



Environmental Specification Notes: Environmental specifications are guaranteed but not tested.

Compliance Certifications (visit www.Pasternack.com for current document)
RoHS Compliant
REACH Compliant
12/17/2014

#### **Plotted and Other Data**

Notes:

Values shown are typical at 25°C.

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PE71S6057 REV 1.1



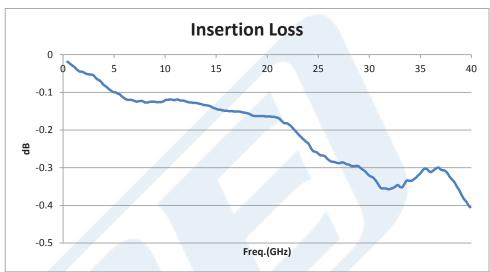


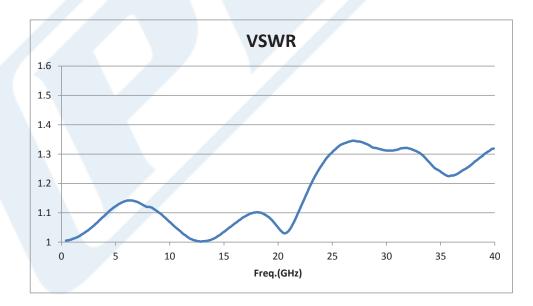


## **Electromechanical Relay Switches Technical Data**

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#### **Typical Performance Data**





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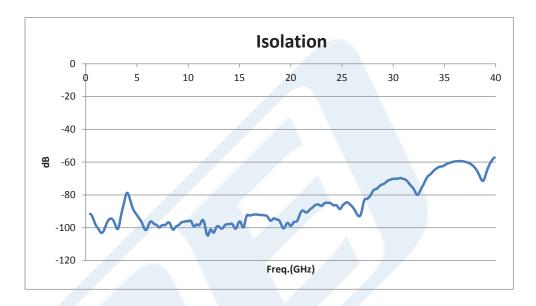






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SPDT Electromechanical Relay Latching Switch DC to 40 GHz, 2.92mm, 10 Watts, 30V Indicator, 28V Control with Indicators, Self Cut Off from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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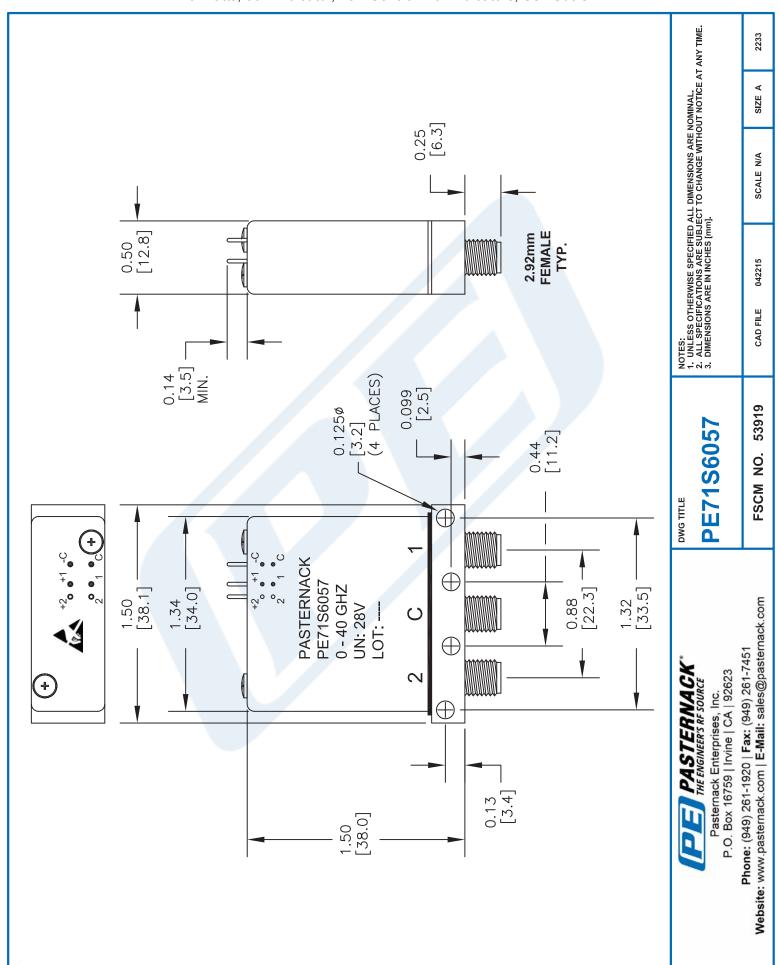
URL: http://www.pasternack.com/2.92mm-spdt-electromechanical-relay-switch-40-ghz-indicators-pe71s6057-p.aspx

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## PE71S6057 CAD Drawing

SPDT Electromechanical Relay Latching Switch DC to 40 GHz, 2.92mm, 10 Watts, 30V Indicator, 28V Control with Indicators, Self Cut Off



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