



SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, up to 80W, 28V Indicators, 2.92mm

## Electromechanical Relay Switches Technical Data Sheet

PE71S6056

### 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 PE71S6056 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 Failsafe Actuator with Position Indicators 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	SPDT
Actuator Type	Failsafe
Switching Sequence	Break before Make
Actuator Options	Indicators
Indicator Rating	1 Watts / 30 Volts / 100 mA

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage	24	28	30	Volts
Actuating Current @ 28 Volts		102		mA
VSWR			1.9:1	
Insertion Loss			0.8	dB
Isolation	50			dB
Input Power (CW)			10	Watts
Switching Time			10	ms Max

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 40 GHz, up to 80W, 28V Indicators, 2.92mm PE71S6056](#)



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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	0.0112 lbs [5.08 g]
Package Type	Connectorized
Operating Life	10,000,000 Cycles

#### Connectors

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

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
Vibration	MIL-STD-202, Method 204D, Cond.D

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

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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

- Values shown are typical at 25°C.

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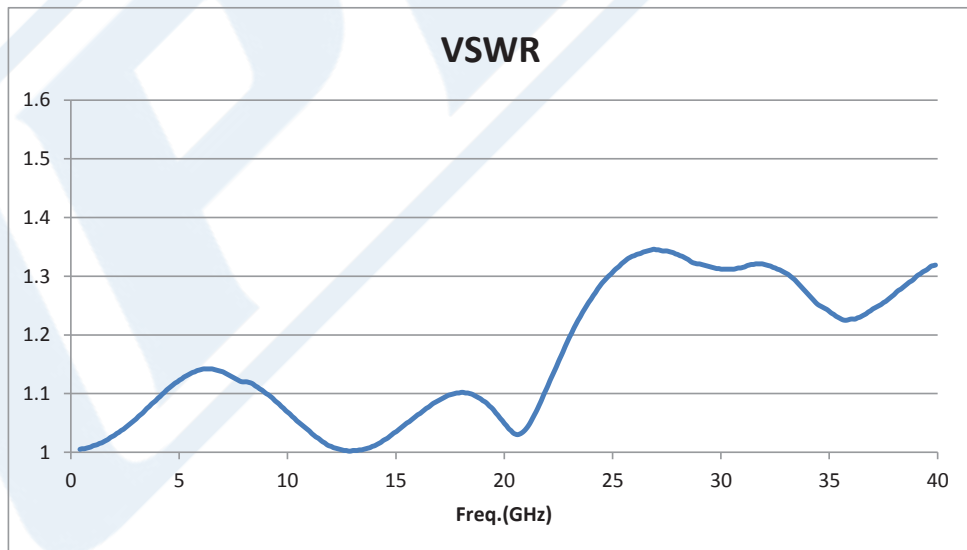
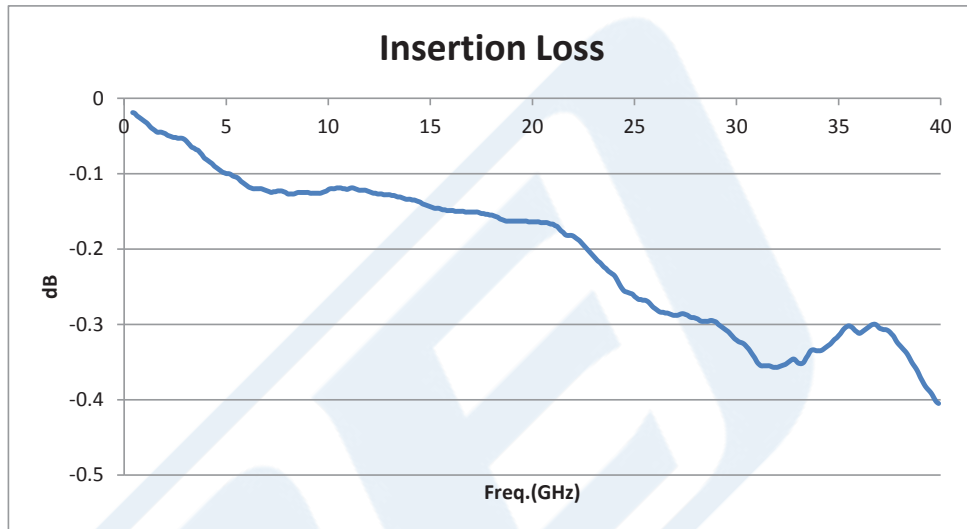


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Typical Performance Data



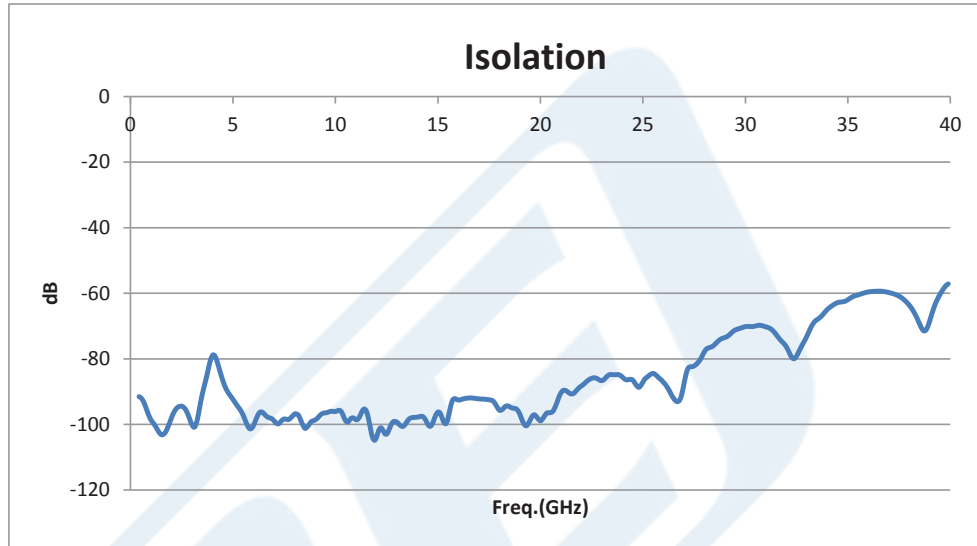
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SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, up to 80W, 28V Indicators, 2.92mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

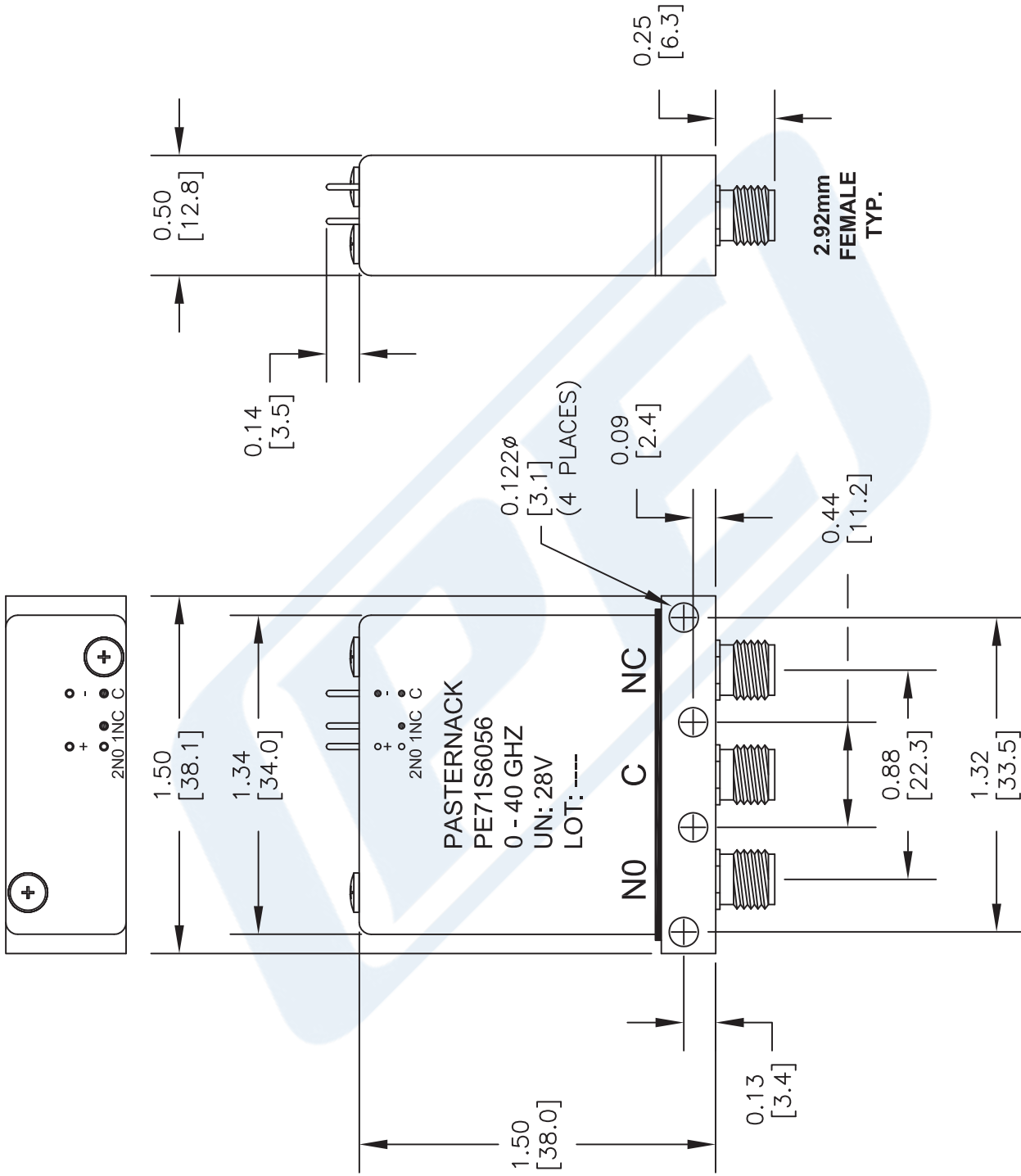
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# PE71S6056 CAD Drawing

SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, up to 80W, 28V Indicators, 2.92mm



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  
**PE71S6056**

**(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

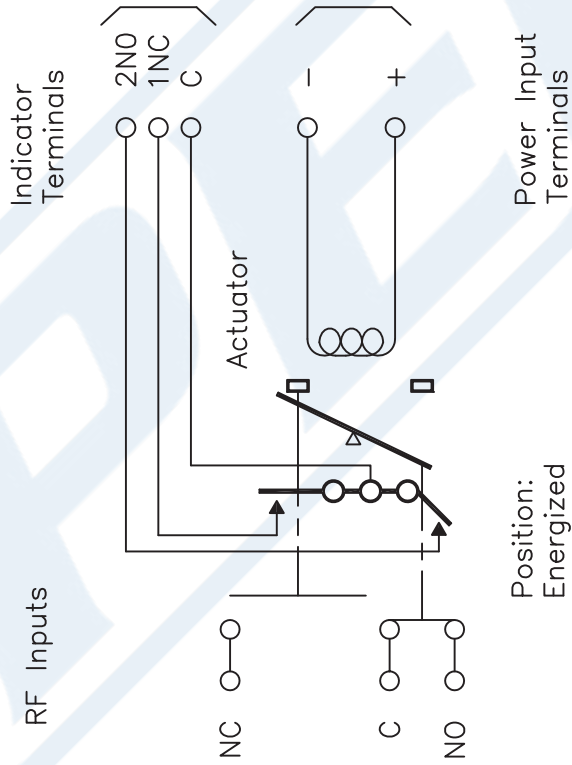
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Voltage	RF Continuity	Indicator
De-Energized	C ↔ NC	C . 1NC
Energized	C ↔ NO	C . 2NO



SCHEMATIC DIAGRAM

DWG TITLE

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**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

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SCALE N/A

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150