



Transfer Electromechanical Relay Failsafe Switch,  
 DC to 12.4 GHz, up to 700W, 28V Indicators, N

## Electromechanical Relay Switches Technical Data Sheet

PE71S6070

### Features

- Transfer Relay Switch
- DC to 12.4 GHz Frequency Range
- 2.5M Cycle Min Operating Life
- 200 Watt Avg Power Max
- -40 to +85 Deg C Operating Temperature
- Insertion Loss 0.5 dB Max
- VSWR 1.5:1 Max

### Applications

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

### Description

The PE71S6070 is a Transfer Electromechanical Relay Switch that operates from DC to 12.4 GHz and can handle up to 700 Watts of CW input power in a Break Before Make condition. The design features a Failsafe Actuator with Position Indicators circuitry and is rated for 2.5M Life Cycles for high reliability operation. Insertion loss is specified from 0.15 dB max and Isolation from 85 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 N Female connectors.

### Electrical Specifications

Switch Type	Transfer
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		12.4	GHz
Impedance		50		Ohms
Operating Voltage	24	28	30	Volts
Actuating Current @ 28 Volts		140		mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			dB
Input Power (CW)			200	Watts
Switching Time			15	ms Max

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, up to 700W, 28V Indicators, N PE71S6070](#)



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### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 1	1 to 2	2 to 3	3 to 8	8 to 12.4	GHz
VSWR, Max	1.15:1	1.2:1	1.25:1	1.35:1	1.5:1	
Insertion Loss, Max	0.15	0.2	0.25	0.35	0.5	dB
Isolation, Min	85	80	75	70	60	dB
Input Power, Max (CW)	700	500	400	250	200	Watts

Electrical Specification Notes:  
 Average Power and Actuating Current values at 25°C.

### Mechanical Specifications

#### Size

Length	1.74 in [44.2 mm]
Width/Diameter	1.75 in [44.45 mm]
Height	1.75 in [44.45 mm]
Weight	0.4995 lbs [226.57 g]
Package Type	Connectorized
Operating Life	2,500,000 Cycles

#### Connectors

RF Connector Type	N 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.G
Vibration	MIL-STD-202, Method 204D, Cond.C

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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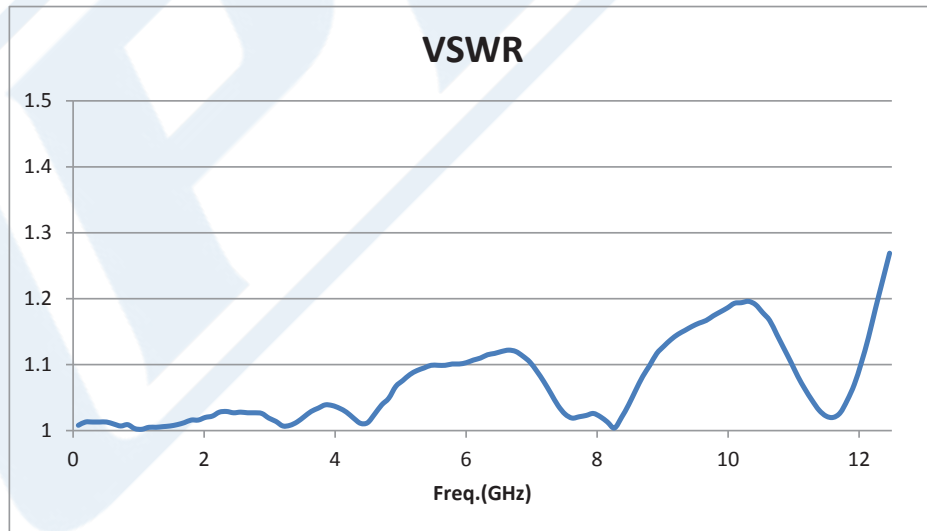
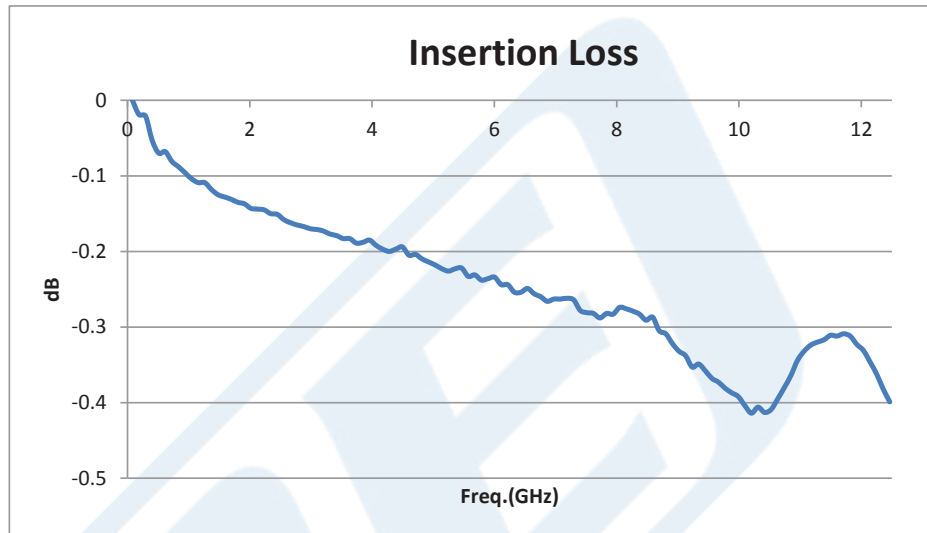


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Typical Performance Data



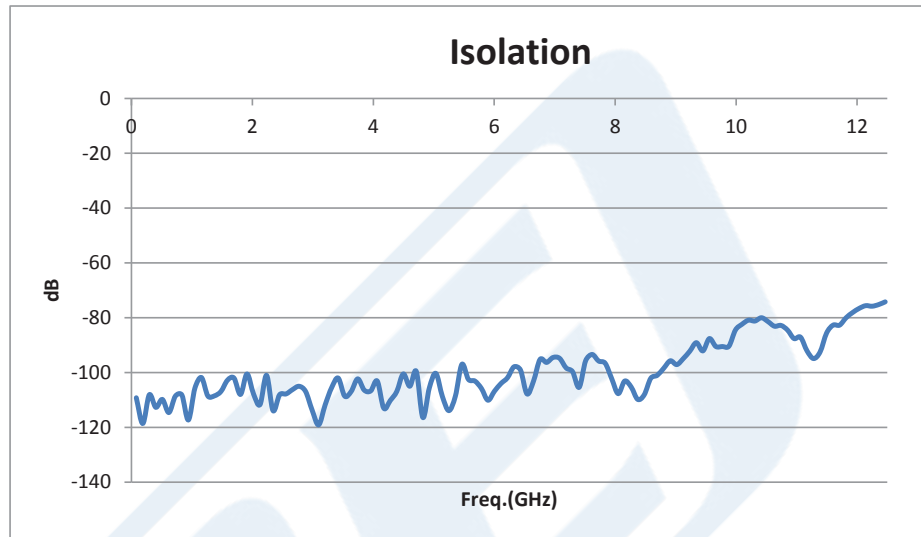
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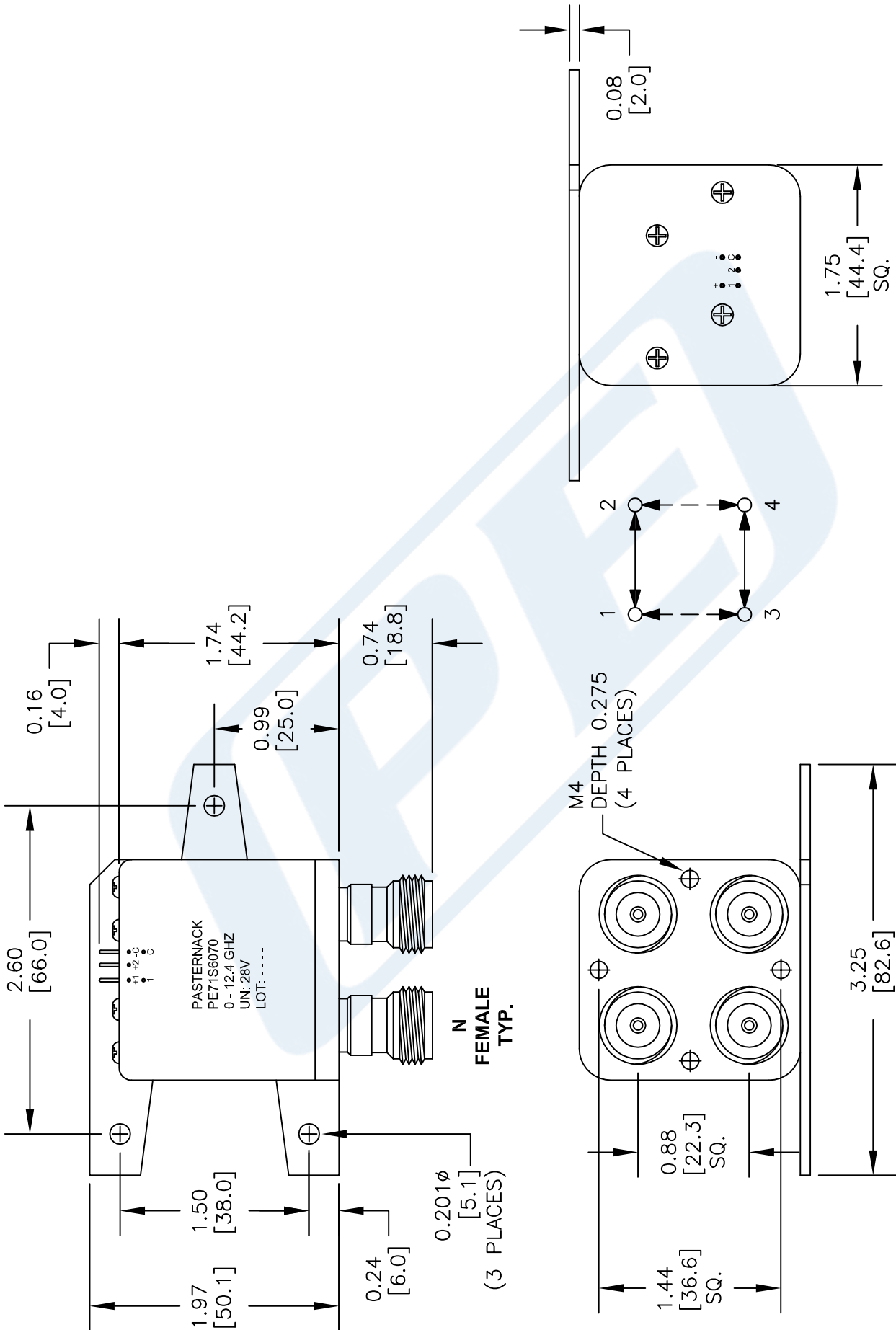
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# PE71S6070 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch, DC to 12.4 GHz, up to 700W, 28V Indicators, N



DWG TITLE

**PE71S6070**

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).

**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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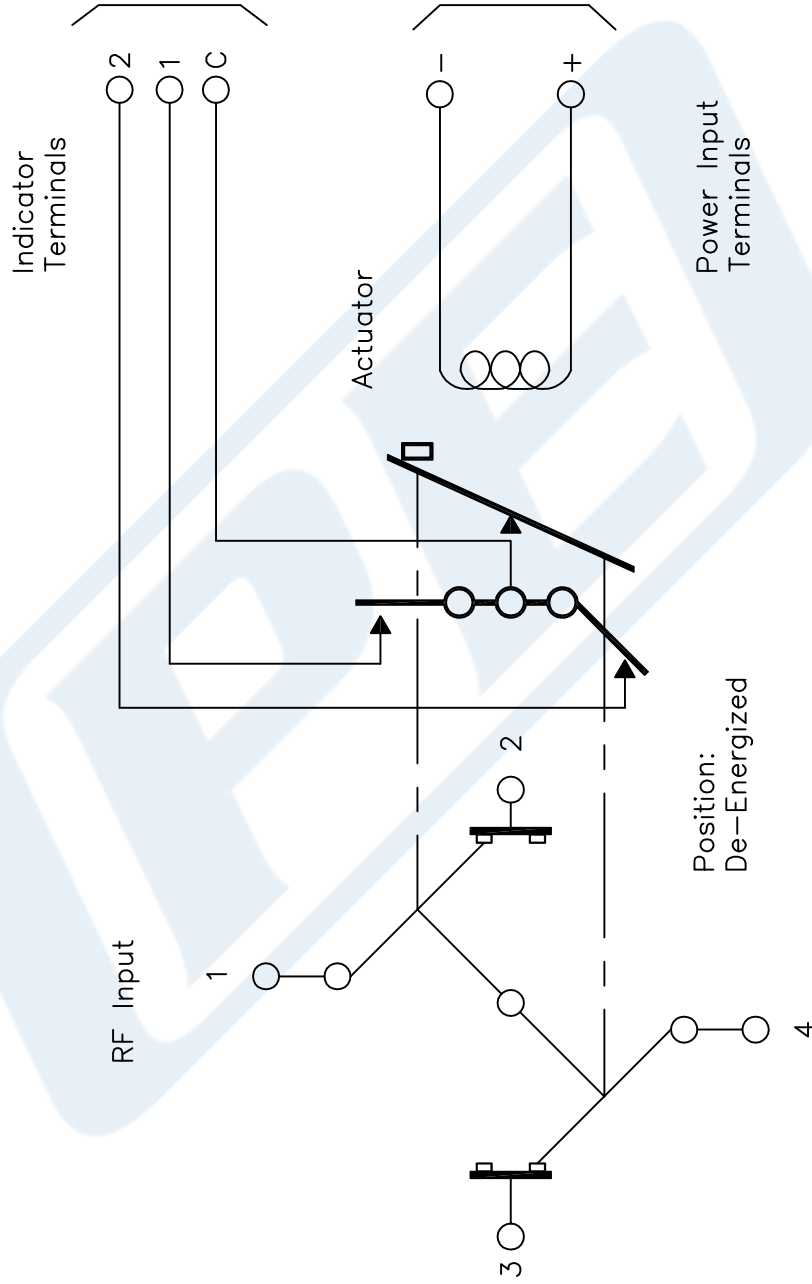
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# PE71S6070 CAD Drawing

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Voltage	RF Continuity	Indicator
Energized	1 ↔ 3    2 ↔ 4	C . 1
De-Energized	1 ↔ 2    3 ↔ 4	C . 2



SCHEMATIC DIAGRAM

DWG TITLE

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**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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