



Transfer Electromechanical Relay Failsafe Switch,  
DC to 18 GHz, up to 90W, 28V, SMA

## Electromechanical Relay Switches Technical Data Sheet

PE71S6400

### Features

- Transfer (DPDT)
- DC to 18 GHz Frequency Range
- 2M Cycle Min Operating Life
- +28 Volt DC
- 60 Watt Avg Power
- Failsafe Actuator
- -25 to +70°C Operating Temperature
- Insertion Loss as low as 0.3 dB Max
- VSWR 1.4:1 Max
- SMA Female RF connectors
- Solder Pin control connection

### Applications

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

### Description

The PE71S6400 is a Transfer (DPDT) electromechanical relay switch that operates across a wide frequency range of DC to 18 GHz and can handle up to 90 Watts of CW input power in a break before make condition. The design features a Failsafe actuator and is rated for 2M life cycles for high reliability operation. Insertion loss is specified as low as 0.2 dB and Isolation up to 70 dB minimum. The Failsafe actuator has a +28 Vdc bias voltage, and operates over a temperature range of -25°C to +70°C. The rugged and compact package assembly supports SMA Female connectors and Solder Pins for command control capability. And for highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for shock and random vibration.

### Electrical Specifications

Switch Type Transfer  
Actuator Type Failsafe  
Switching Sequence Break before Make

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage	26	28	30	Volts
Actuating Set Current @ 28 Volts		90		mA
VSWR		1.2:1	1.4:1	
Insertion Loss		0.2	0.5	dB
Isolation	60	70		dB
Input Power (CW)			60	Watts
Switching Time			20	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 18 GHz, up to 90W, 28V, SMA PE71S6400](#)



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### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12	12 to 18			GHz
VSWR, Max	1.2:1	1.3:1	1.4:1			
Insertion Loss, Max	0.2	0.3	0.5			dB
Isolation, Min	70	60	60			dB
Input Power, Typ (CW)	90	75	60			Watts

### Mechanical Specifications

#### Size

Body Material and Plating

Aluminum

Package Type

Connectorized

Operating Life

2,000,000 Cycles

#### Connectors

RF Connector Type

SMA Female

RF Connector Contact Material and Plating

Beryllium Copper, Gold

RF Connector Body Material and Plating

Aluminum, Nickel

Control Connector

Solder Pin

### Environmental Specifications

#### Temperature

Operating Range

-25 to +70 deg C

Storage Range

-55 to +100 deg C

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

### Plotted and Other Data

Notes:

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## Electromechanical Relay Switches Technical Data

PE71S6400

Transfer Electromechanical Relay Failsafe Switch, DC to 18 GHz, up to 90W, 28V, SMA 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.

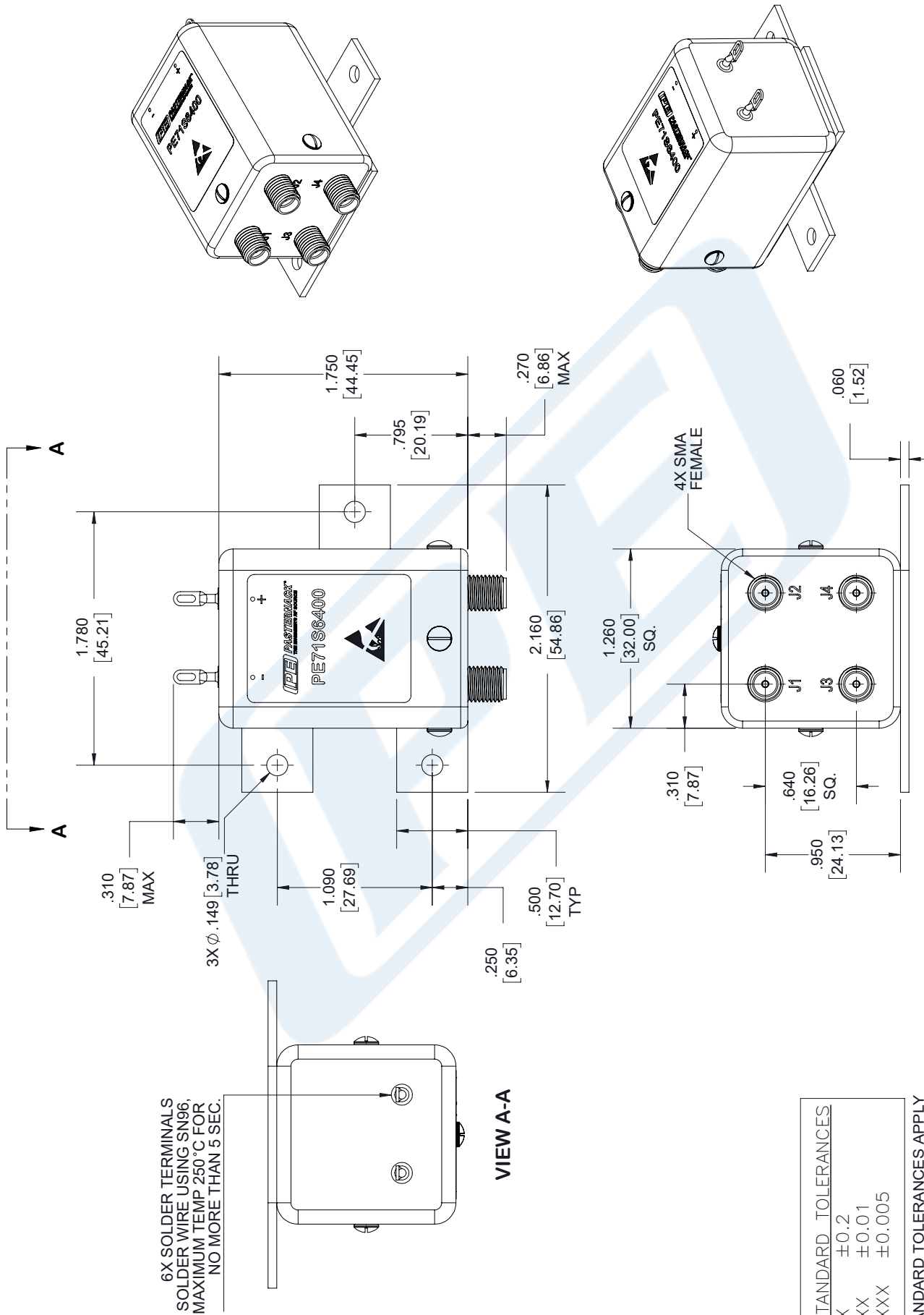
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Transfer Electromechanical Relay Failsafe Switch, DC to 18 GHz, up to 90W, 28V, SMA PE71S6400](https://www.pasternack.com/transfer-electromechanical-relay-failsafe-switch-18-ghz-60w-28v-sma-pe71s6400-p.aspx)

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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.

# PE71S6400 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch, DC to 18 GHz, up to 90W, 28V, SMA



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  
**PE71S6400**

CAGE CODE **53919**

SCALE N/A

SIZE A

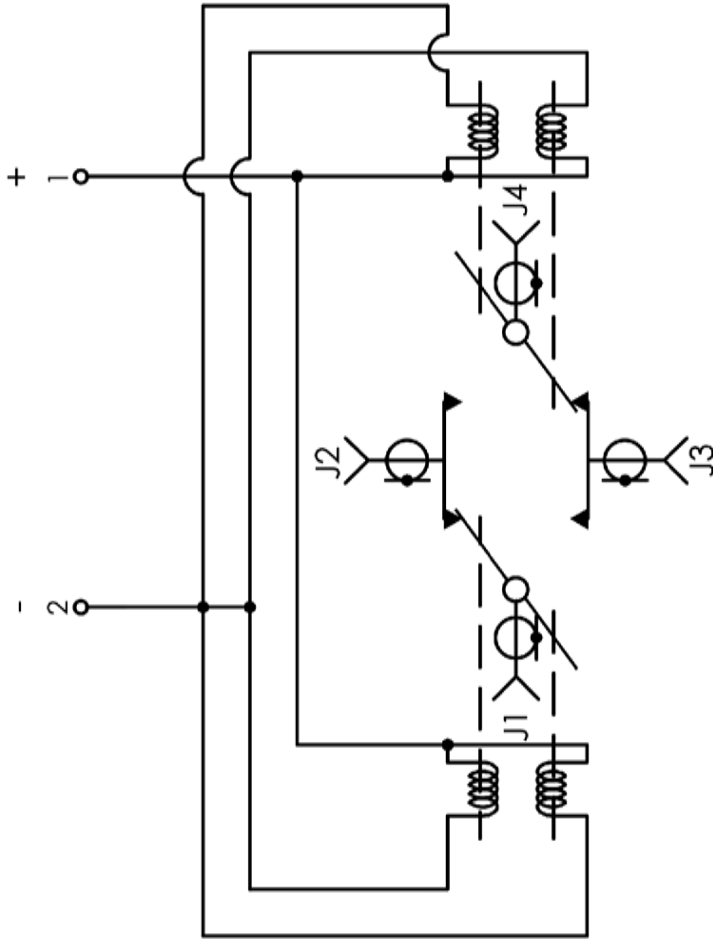
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# PE71S6400 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch, DC to 18 GHz, up to 90W, 28V, SMA



**SCHEMATIC SHOWN IN FAILSAFE POSITION**

VOLTAGE	RF PATH
DE-ENERGIZED	J1-J2, J3-J4
ENERGIZED	J1-J3, J2-J4

**STANDARD TOLERANCES**

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

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