



SP4T Electromechanical Relay Latching Switch, DC to 40 GHz,
5W, 12V Indicators, TTL, Self Cut Off, Diodes, 2.92mm

Electromechanical Relay Switches Technical Data Sheet

PE71S6140

Features

- Single Pole Four Throw Relay Switch
- DC to 40 GHz Frequency Range
- 1M Cycle Min Operating Life
- Latching Actuator
- Self Cut Off, TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 1 dB max
- Isolation 50 dB min
- 5 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation

Description

The PE71S6140 is a Single Pole Four Throw Electromechanical Relay Switch that operates from DC to 40 GHz and can handle up to 18 Watts of CW input power in a Break Before Make condition. The design features a Latching Actuator with Self Cut Off circuitry, 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 70 dB min, with +12 Vdc operating voltage and performance is guaranteed over -35°C to +85°C. The package interface uses solder terminals and 2.92mm Female connectors.

Electrical Specifications

Switch Type	SP4T
Actuator Type	Latching
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Self Cut Off, Diodes
TTL Control	on: 2.4 to 5 Volts off: 0 to 0.8 Volts

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Set Current @ 12 Volts			480	mA
VSWR			2:1	
Insertion Loss			1	dB
Isolation	50			dB
Input Power (CW) (at 40 GHz)			5	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: [SP4T Electromechanical Relay Latching Switch, DC to 40 GHz, 5W, 12V Indicators, TTL, Self Cut Off, Diodes, 2.92mm PE71S6140](#)



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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	18 to 26.5	26.5 to 40	GHz
VSWR, Max	1.3:1	1.4:1	1.5:1	1.7:1	2:1	
Insertion Loss, Max	0.2	0.4	0.5	0.7	1	dB
Isolation, Min	70	60	60	55	50	dB

Mechanical Specifications

Size

Length	2.38 in [60.45 mm]
Width/Diameter	2.25 in [57.15 mm]
Height	2.25 in [57.15 mm]
Weight	0.542 lbs [245.85 g]
Body Material and Plating	Aluminum
Package Type	Connectorized
Operating Life	1,000,000 Cycles

Connectors

RF Connector Type	2.92mm Female
RF Connector Contact Material and Plating	Beryllium Copper, Gold
RF Connector Body Material and Plating	Passivated Stainless Steel
Control Connector	Solder Pin

Environmental Specifications

Temperature

Operating Range	-35 to +85 deg C
ESD Sensitivity	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 (see [product page](#) for current document)

Plotted and Other Data

Notes:

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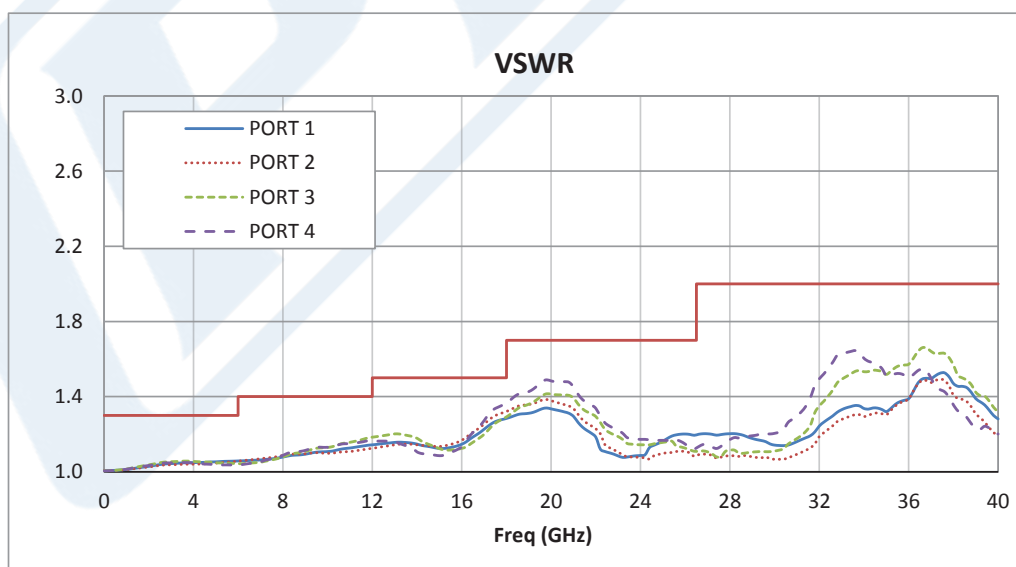
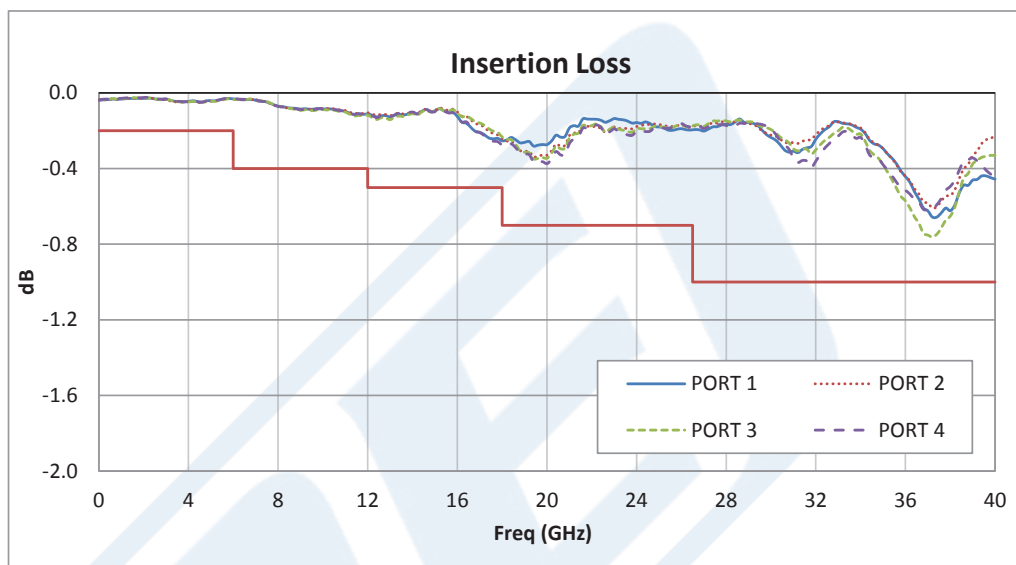


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PE71S6140

Typical Performance Data



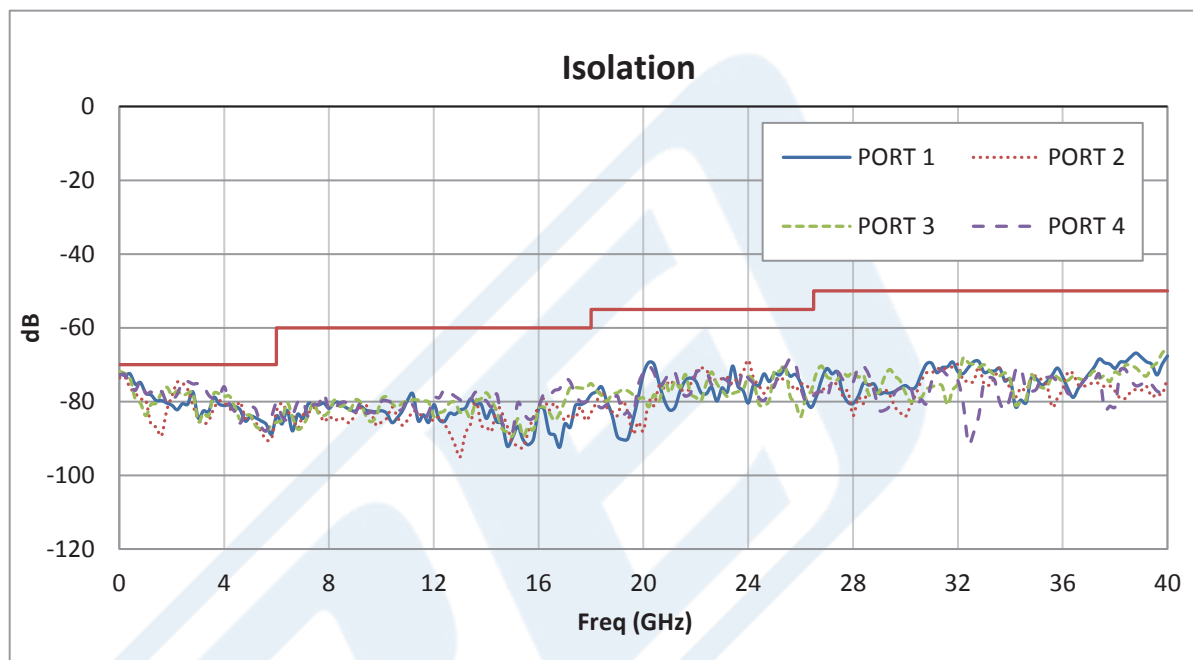
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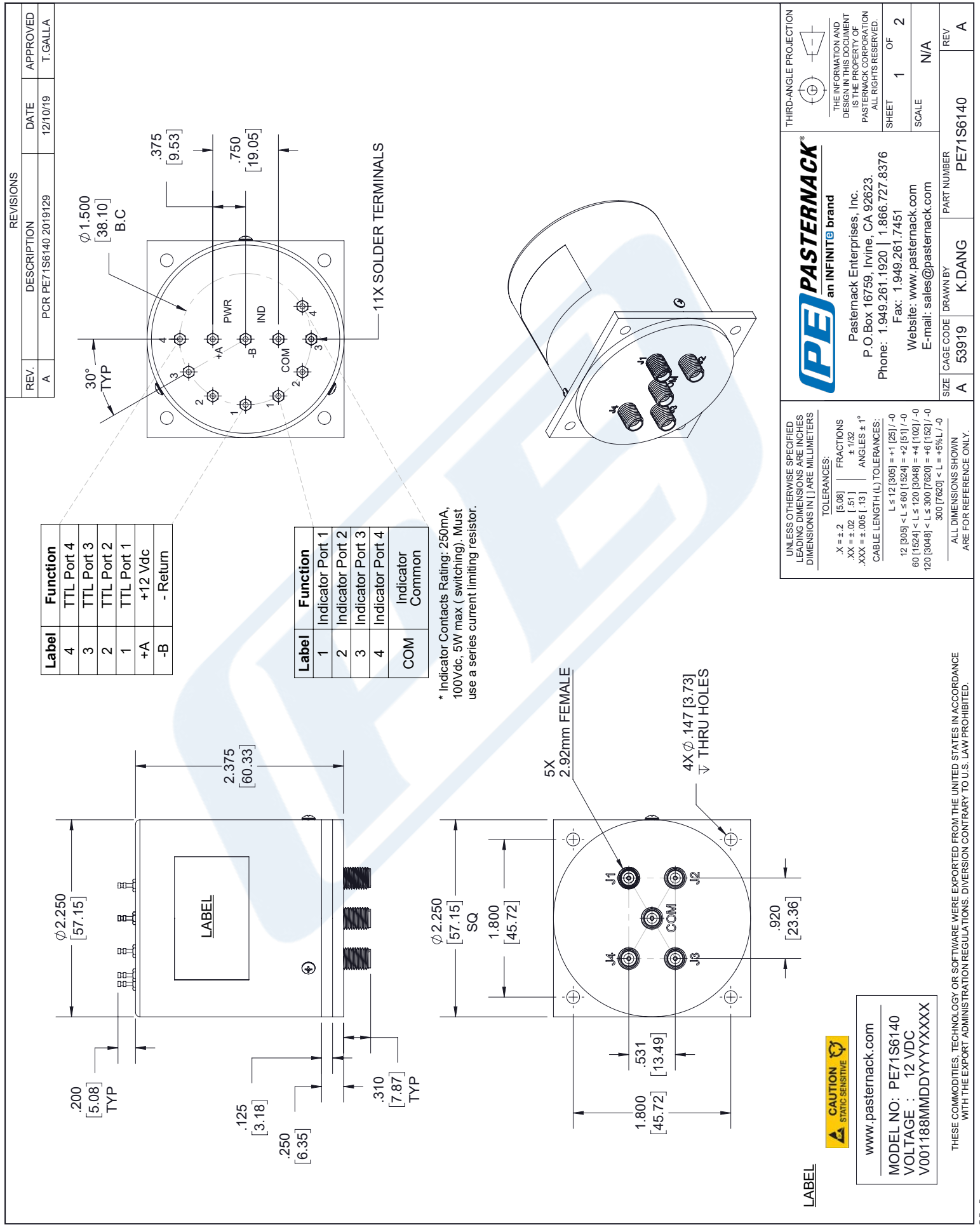
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URL: <https://www.pasternack.com/2.92mm-sp4t-electromechanical-relay-switch-46-ghz-latching-indicators-ttl-logic-pe71s6140-p.aspx>

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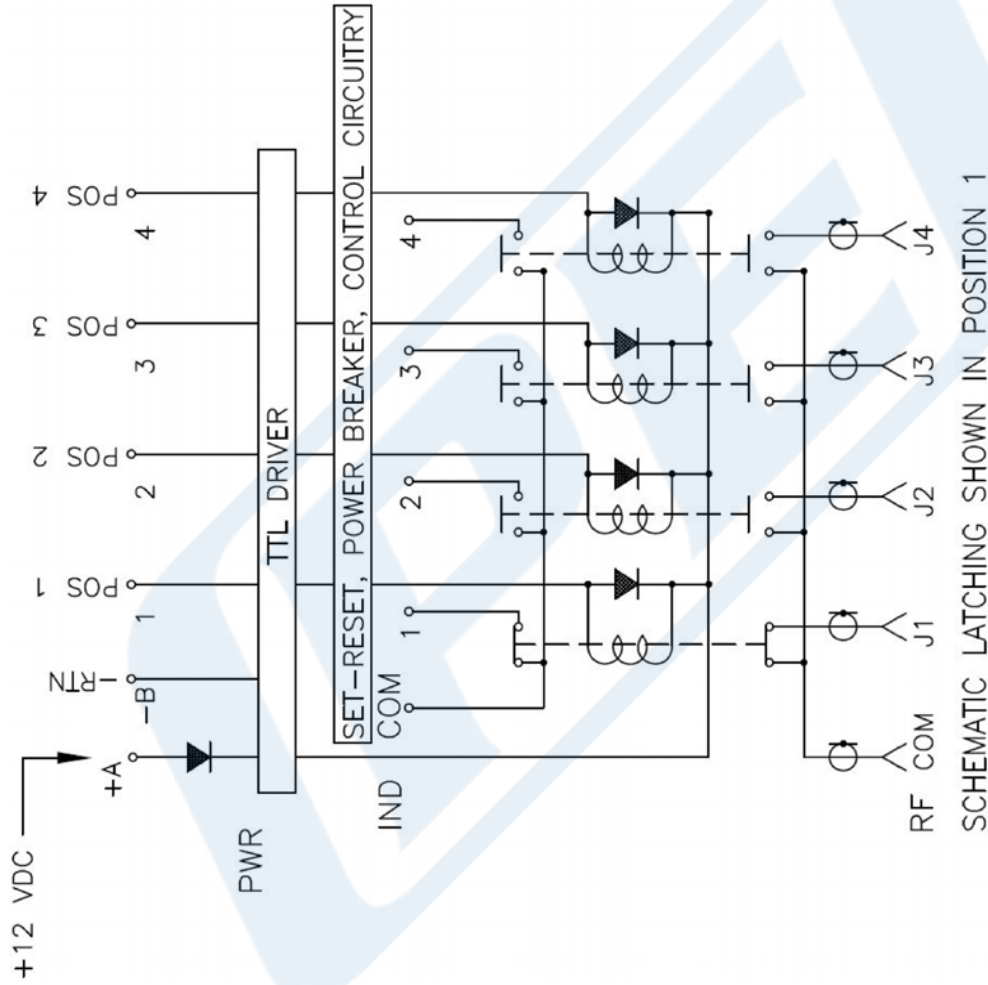
PE71S6140 CAD Drawing

SP4T Electromechanical Relay Latching Switch, DC to 40 GHz,
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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08]
 .XX = ±.02 [.51]
 .XXX = ±.005 [.13]
 ANGLES ± 1°
 CABLE LENGTH (L) TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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Pasternack Enterprises, Inc.
P.O. Box 16759, Irvine, CA 92623.
Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

SIZE A CAGE CODE 53919 DRAWN BY K.DANG PART NUMBER PE71S6140 REV A

THIRD-ANGLE PROJECTION

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SHEET 2 OF 2
SCALE N/A