



SP6T Electromechanical Relay Normally Open Switch DC to 26.5 GHz, SMA, 40 Watts, 28V Control with TTL

Electromechanical Relay Switches Technical Data Sheet

PE71S6088

Features

- Single Pole Six Throw Relay Switch
- DC to 26.5 GHz Frequency Range
- 10M Cycle Min (25M Typ) Operating Life
- 40 Watt Avg Power Max
- -40 to +85 Deg C Operating Temperature
- Insertion Loss 0.6 dB Max
- VSWR 1.6:1 Max

Applications

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

Description

The PE71S6088 is a Single Pole Six Throw Electromechanical Relay Switch that operates from DC to 26.5 GHz and can handle up to 250 Watts of CW input power in a Break Before Make condition. The design features a Normally Open Actuator with TTL Logic and is rated for 10M Life Cycles (25M typical) for high reliability operation. Insertion loss is specified from 0.2 dB max and Isolation from 80 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 SMA Female connectors.

Electrical Specifications

Switch Type	SP6T, Reflective
Actuator Type	Normally Open
Switching Sequence	Break before Make
Actuator Options	TTL Logic
TTL Control	on: 2.2 to 5.5 Volts off: 0 to 0.8 Volts

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		26.5	GHz
Impedance		50		Ohms
Operating Voltage	21	28	30	Volts
Actuating Current @ 28 Volts		110		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	55			dB
Coil Resistance		250		Ohms
Input Power (CW)			40	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP6T Electromechanical Relay Normally Open Switch DC to 26.5 GHz, SMA, 40 Watts, 28V Control with TTL PE71S6088](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 8	8 to 12.4	12.4 to 18	18 to 26.5	GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1	1.6:1	
Insertion Loss, Max	0.2	0.3	0.4	0.5	0.6	dB
Isolation, Min	80	70	60	60	55	dB
Input Power, Max (CW)	250	150	120	100	40	Watts

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

Mechanical Specifications

Size

Length	1.45 in [36.83 mm]
Width/Diameter	1.327 in [33.71 mm]
Height	1.327 in [33.71 mm]
Weight	0.24 lbs [108.86 g]
Operating Life	10,000,000 Cycles
Switching Time	10 ms Max

Connectors

RF Connector Type	SMA Female
Control Connector	Solder Pins

Mechanical Specification Notes:
Solder Pins: 250°C max/30sec.
Specified operating life is minimum. Typical operating life is 25M cycles.

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +85 deg C
Shock	MIL-STD-202, Method 213B, Cond. C
Sine Vibration	MIL-STD-202, Method 204D, Cond. D

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Random Vibration
ESD Sensitivity



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.

MIL-STD-202, Method 214A, Profile I, Cond. F
ESD Sensitive Material. Transport material in approved
ESD bags. Handle in approved ESD Workstation.

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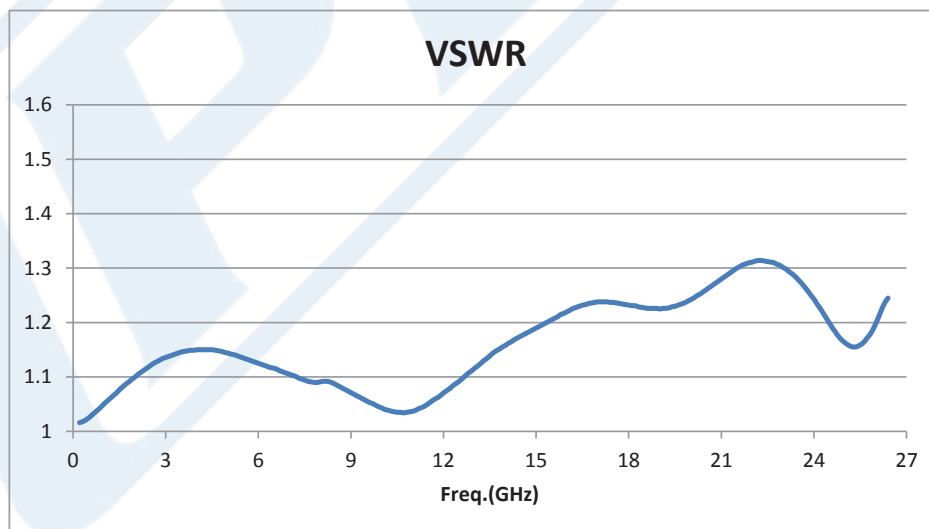
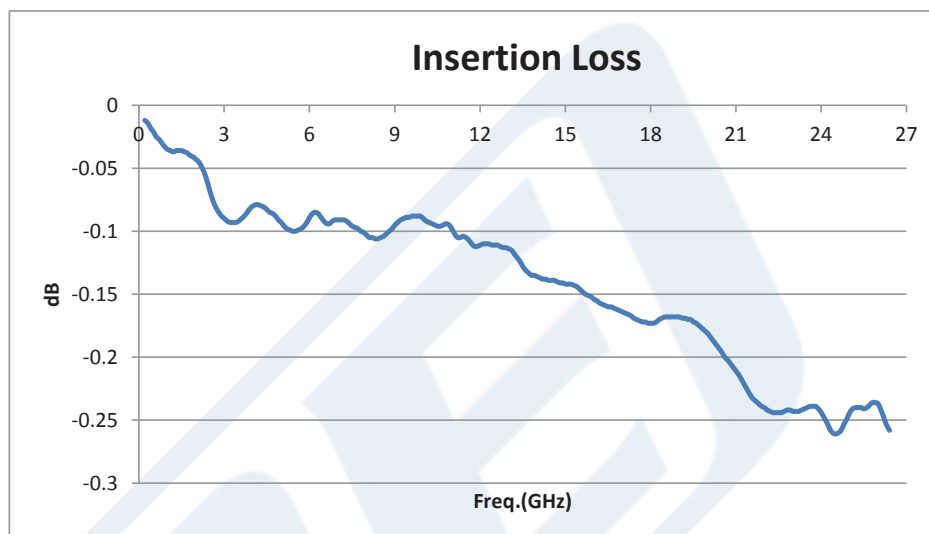


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Typical Performance Data



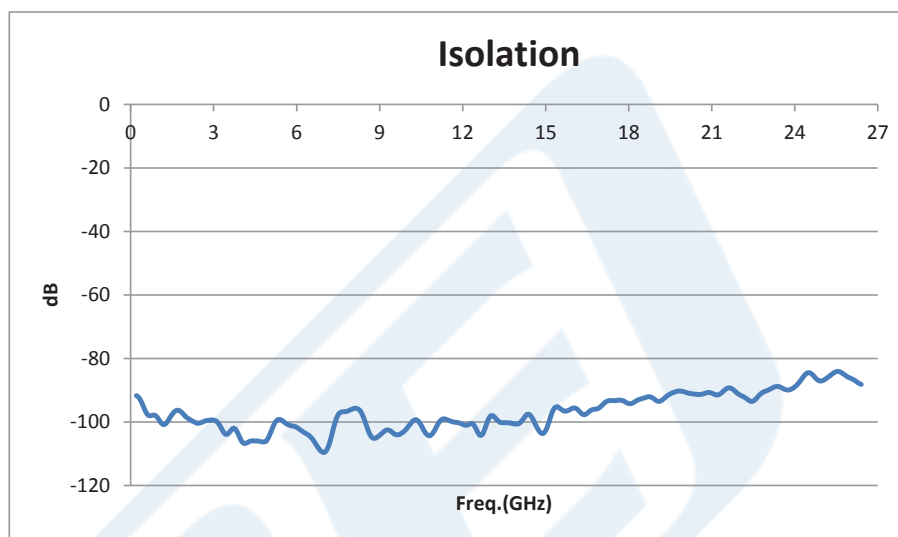
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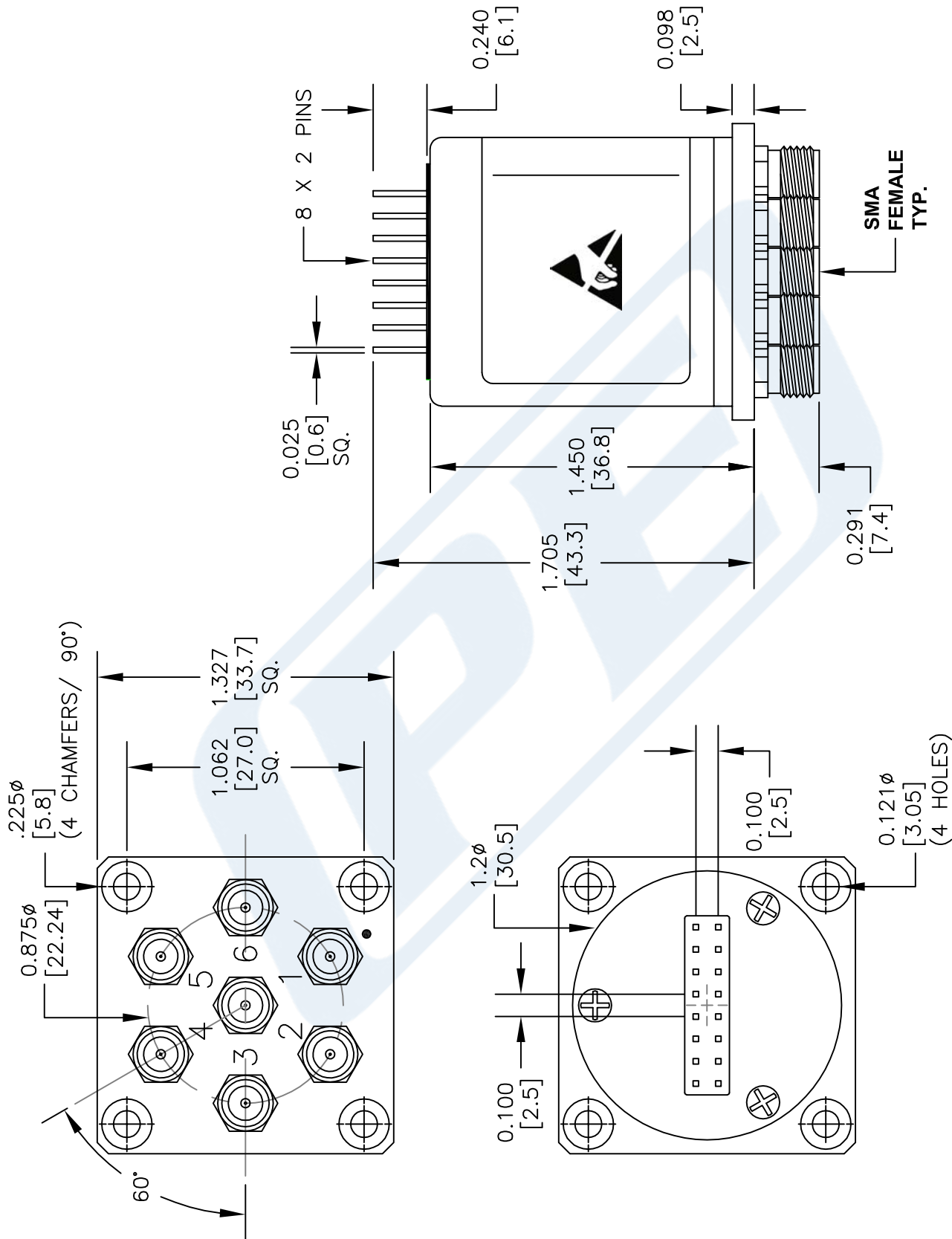
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PE71S6088 CAD Drawing

SP6T Electromechanical Relay Normally Open Switch DC to
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DWG TITLE

PE71S6088

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].

FSCM NO. 53919

CAD FILE 122914

SCALE N/A

SIZE A

150

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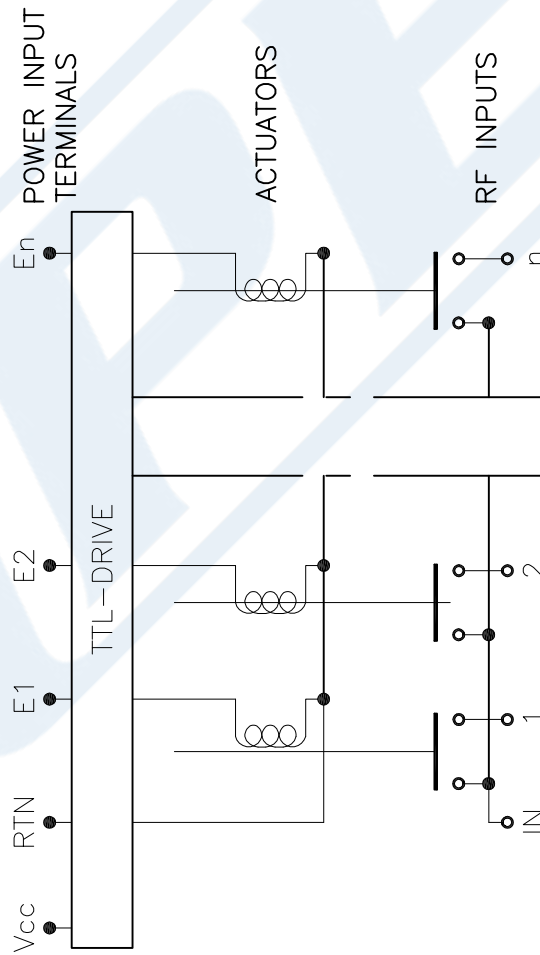
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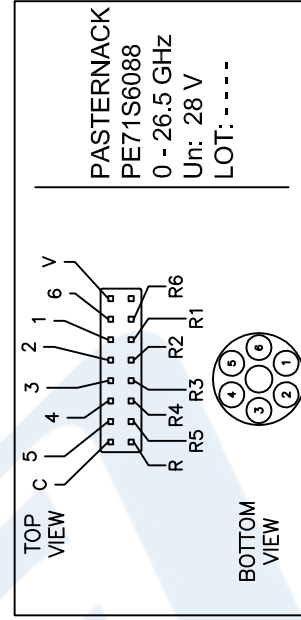
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SCHEMATIC DIAGRAM



PIN	Indicator
C	RTN
V	Vcc
1	E1
2	E2
3	E3
4	E4
5	E5
6	E6
R	NC
R1	NC
R2	NC
R3	NC
R4	NC
R5	NC
R6	NC



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CAD FILE 120214

SCALE N/A

SIZE A

150