



## SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Diodes

### Electromechanical Relay Switches Technical Data Sheet

PE71S6312

#### Features

- SP6T Absorptive Switch
- DC to 22 GHz Operating Frequency Range
- 1 M Cycles min

#### Applications

- Test & Measurement
- Communications System
- Instrumentation

#### Description

The PE71S6312 is a Single Pole Six Throw Absorptive Switch that operates from DC to 22 GHz. The switch has a normally open actuator and an indicator and 1M life cycles. The switch has an operating voltage of 28 Volts and has TTL control.

#### Electrical Specifications

Switch Type	SP6T, Absorptive
Actuator Type	Normally Open
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Diodes
TTL Control	on: "High" to off: "Low" to

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		22	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		170		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	60			dB
Input Power (CW) (22 GHz)			20	Watts

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8	8 to 12	12 to 18	18 to 22	GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1	1.6:1	
Insertion Loss, Max	0.3	0.35	0.4	0.5	0.6	dB
Isolation, Min	75	70	65	60	60	dB

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 22 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Diodes PE71S6312](#)



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### Mechanical Specifications

#### Size

Length	2.13 in [54.1 mm]
Width/Diameter	2.13 in [54.1 mm]
Height	2.58 in [65.53 mm]
Weight	0.625 lbs [283.5 g]
Body Material and Plating	Aluminum, Nickel

Operating Life	1,000,000 Cycles
Switching Time	15 ms Max

#### Connectors

RF Connector Type	SMA Female
RF Connector Contact Material and Plating	Beryllium Copper, Gold
RF Connector Body Material and Plating	Passivated Stainless Steel

### Environmental Specifications

#### Temperature

Operating Range	-25 to +65 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant

### Plotted and Other Data

Notes:

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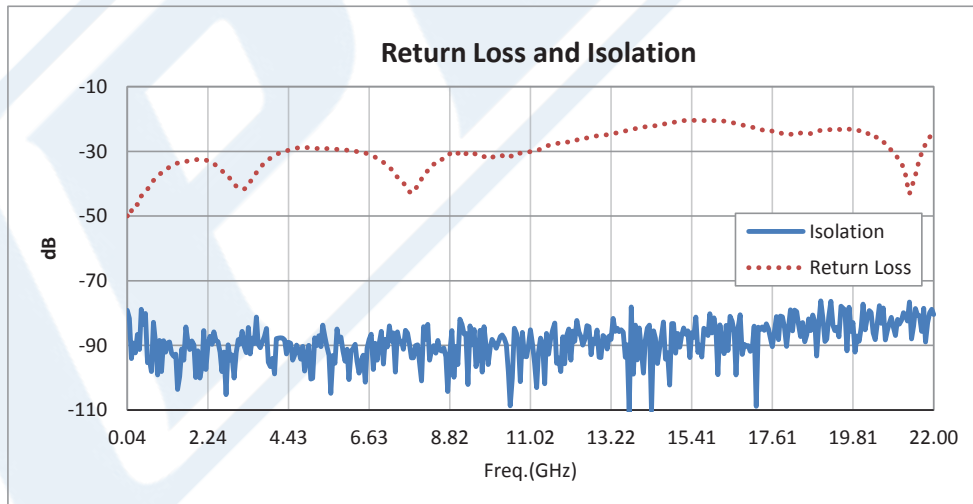
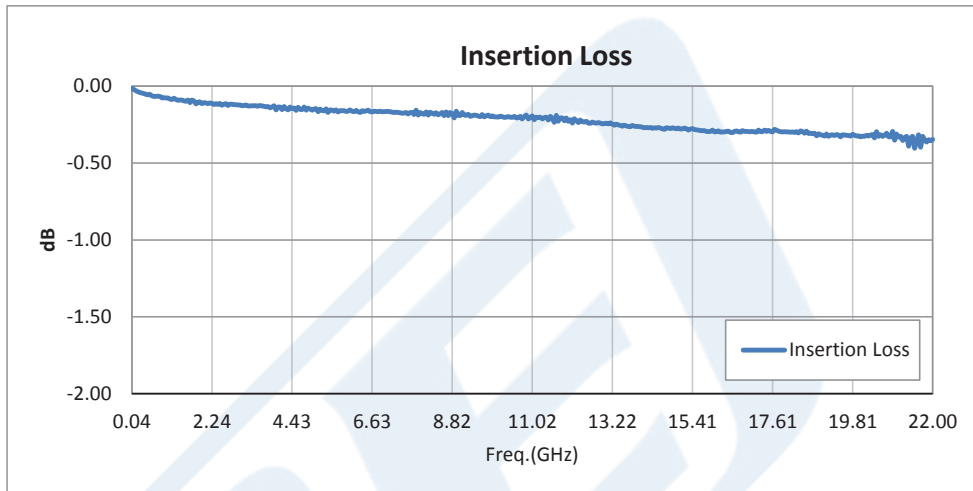


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Typical Performance Data



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SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz, SMA, 20 Watts, 28V Control, Indicators, TTL, Diodes from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

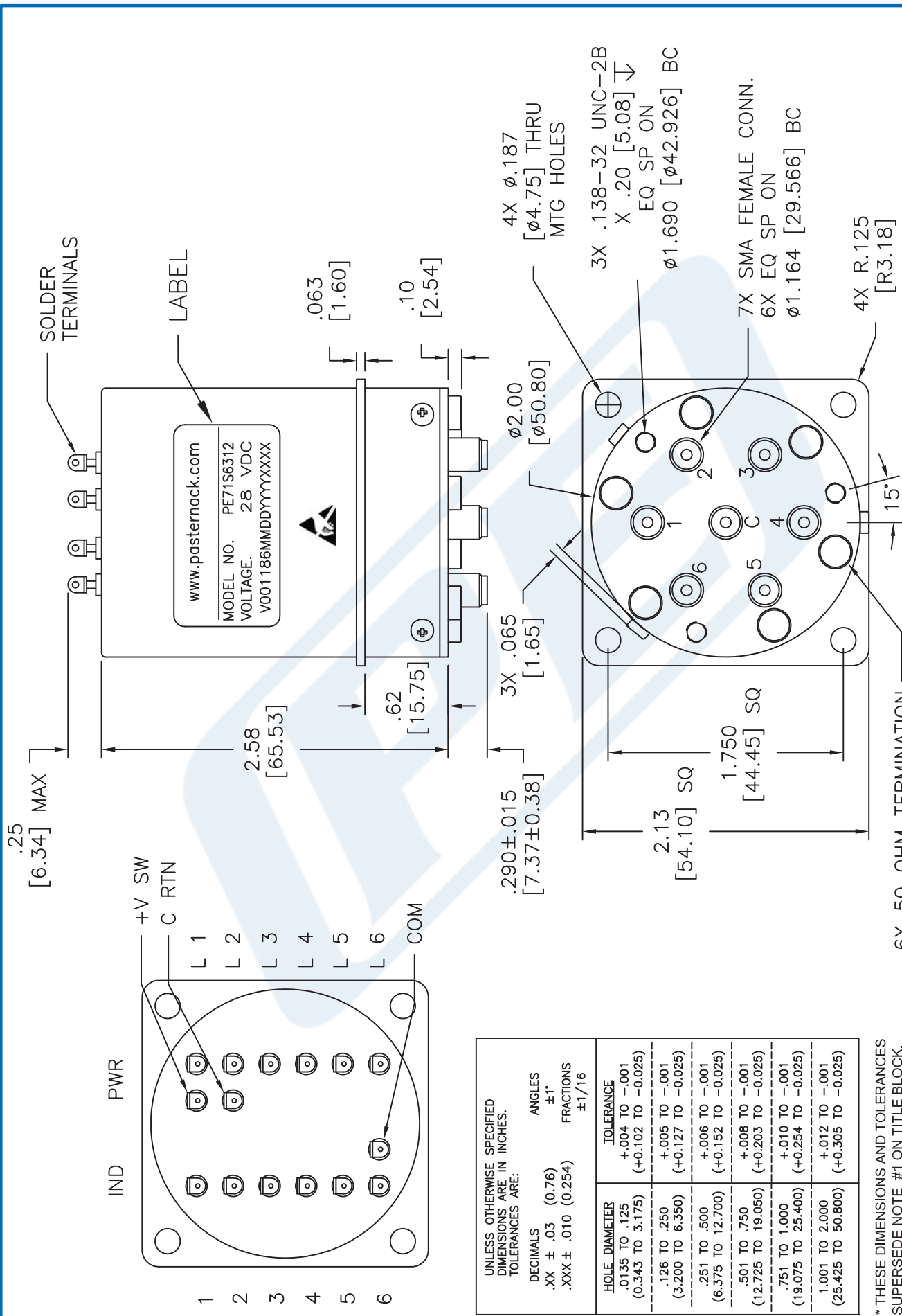
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# PE71S6312 CAD Drawing

SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz,  
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.	
DECIMALS	ANGLES
.XX ± .03 (0.76)	±1°
.XXX ± .010 (0.254)	FRACTIONS ±1/16
HOLE DIAMETER	TOLERANCE
.0135 TO .125 (0.343 TO 3.175)	+0.004 TO -0.001 (+0.102 TO -0.025)
.126 TO .250 (3.200 TO 6.350)	+0.005 TO -0.001 (+0.127 TO -0.025)
.251 TO .500 (6.375 TO 12.700)	+0.006 TO -0.001 (+0.152 TO -0.025)
.501 TO .750 (12.725 TO 19.050)	+0.008 TO -0.001 (+0.203 TO -0.025)
.751 TO 1.000 (19.075 TO 25.400)	+0.010 TO -0.001 (+0.254 TO -0.025)
1.001 TO 2.000 (25.425 TO 50.800)	+0.012 TO -0.001 (+0.305 TO -0.025)

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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  
**PE71S6312**

FSCM NO. 53919

CAD FILE 090115

SCALE N/A

SIZE A

2233

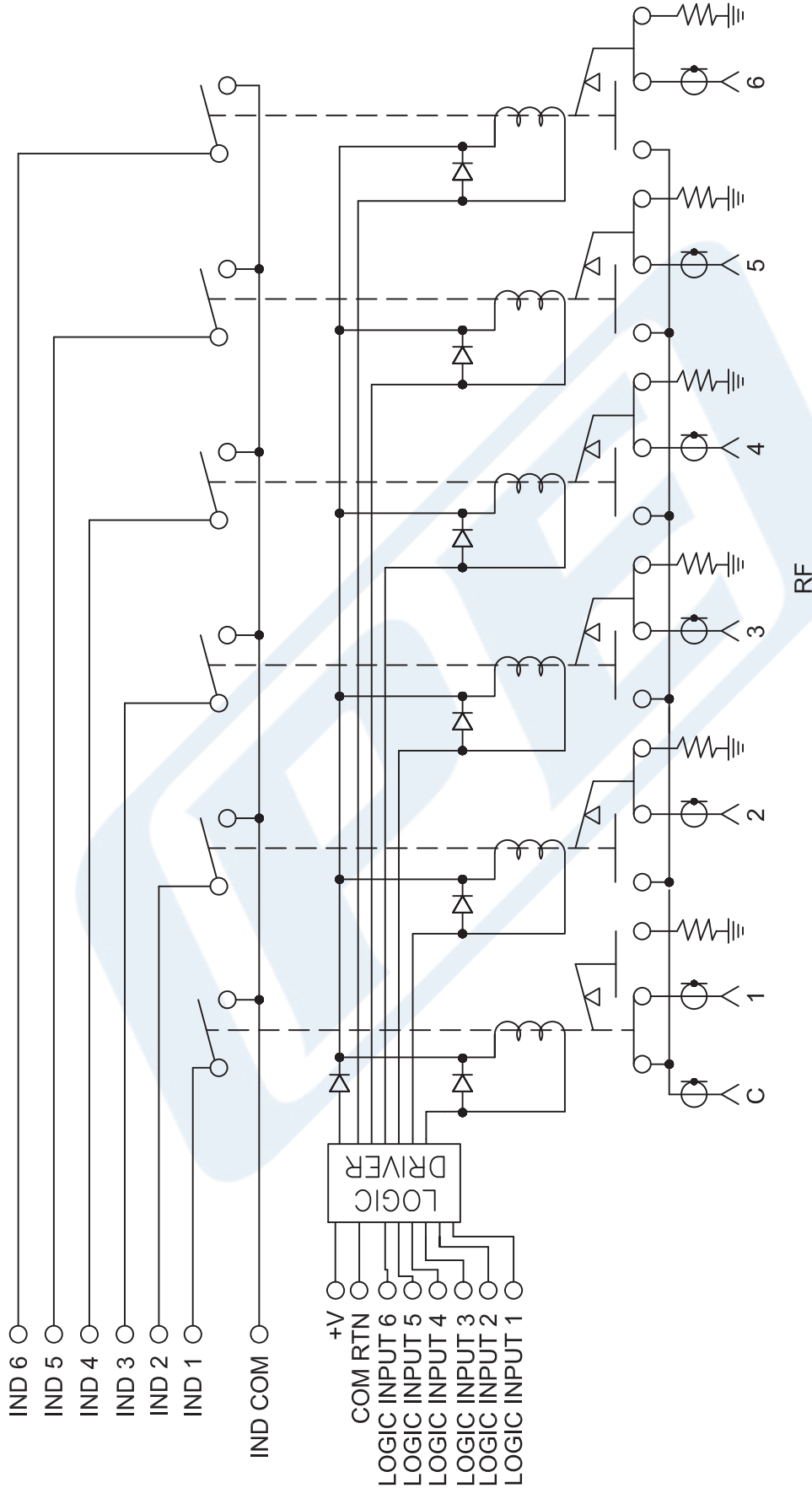
**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE

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# PE71S6312 CAD Drawing

SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz,  
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SCHEMATIC NORMALLY OPEN SHOWN IN DE-ENERGIZED POSITION

DWG TITLE

**PE71S6312**

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