



SPDT Electromechanical Relay Switch DC to 12.4 GHz, N,  
 160 Watts, 28V Control with Indicators, Failsafe, TTL

**TECHNICAL DATA SHEET** PE71S6161

The PE71S6161 is Single Pole Double Throw Switch that operates from DC to 12.4 GHz. The switch has a Failsafe actuator and an indicator and 1M life cycles. The switch has an operating voltage of +28 Volts and has TTL control.

**Features**

- SPDT Switch
- DC to 12.4 GHz Operating Frequency Range
- 1 M Cycles min
- Latching Switch
- Indicator
- TTL Control

**Applications**

- Test & Measurement
- Communications System
- Instrumentation

**Electrical Specifications**

Frequency Range	DC to 12.4 GHz
Impedance	50 Ohms
Actuator	Indicators, Failsafe, TTL Logic
Actuating Current	130 mA
Control Voltage	28 Volts
TTL Inputs (E): - High Level	2.4 to 5 Volts / at 5 Volts
- Low Level	0 to 0.8 Volts / at 0.8 Volts
TTL Control	"1": On, "0": Off, Enable: 5V, Disable: 0V
Trigger	"on" = 2.4 Volts
	"off" = 0.8 Volts
RF Input Power (Max CW)	160 Watts

**RF Characteristic**

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Frequency Range	DC to 2	2 to 4	4 to 12.4			GHz
VSWR, Max	1.15:1	1.2:1	1.6:1			
Insertion Loss, Max	0.2	0.25	0.6			dB
Isolation, Min	80	80	60			dB

**Mechanical Specifications**

Connector Type	N Female
Operating Life	1,000,000
Terminals	Solder Pins
Switching Time (nominal voltage, 25°C)	50 ms Max

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-25 to +65 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SPDT Electromechanical Relay Switch DC to 12.4 GHz, N, 160 Watts, 28V Control with Indicators, Failsafe, TTL PE71S6161](#)





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Environment

Designed to Meet MIL-DTL-3928

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)  
Not RoHS Compliant

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.



SPDT Electromechanical Relay Switch DC to 12.4 GHz, N, 160 Watts, 28V Control with Indicators, Failsafe, TTL 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.

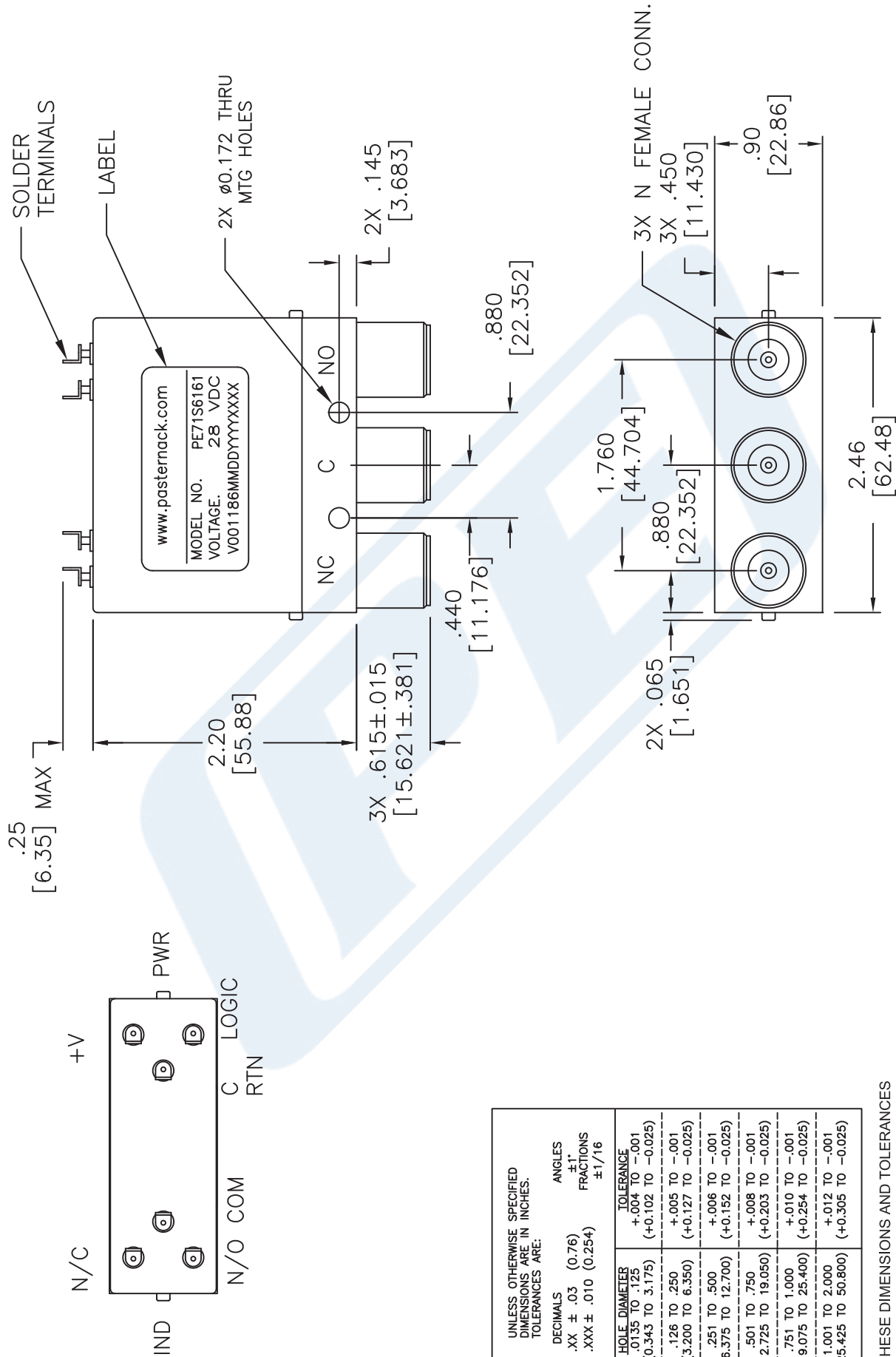
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URL: <http://www.pasternack.com/n-spdt-electromechanical-relay-switch-12.4-ghz-indicators-failsafe-ttl-logic-pe71s6161-p.aspx>

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.

# PE71S6161 CAD Drawing

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		ANGLES	
DECIMALS		±1°	FRACTIONS
.XX ± .03 (0.76)			±1/16
.XXX ± .010 (0.254)			
HOLE DIAMETER	TOLERANCE		
.0135 TO .125 (0.343 TO 3.175)	+ .004 TO -.001 (+0.102 TO -0.025)		
.126 TO .250 (3.200 TO 6.350)	+ .005 TO -.001 (+0.127 TO -0.025)		
.251 TO .500 (6.375 TO 12.700)	+ .006 TO -.001 (+0.152 TO -0.025)		
.501 TO .750 (12.725 TO 19.050)	+ .008 TO -.001 (+0.203 TO -0.025)		
.751 TO 1.000 (19.075 TO 25.400)	+ .010 TO -.001 (+0.254 TO -0.025)		
1.001 TO 2.000 (25.425 TO 50.800)	+ .012 TO -.001 (+0.305 TO -0.025)		

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

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE  
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DWG TITLE  
**PE71S6161**

FSCM NO. 53919

CAD FILE 051315

SCALE N/A

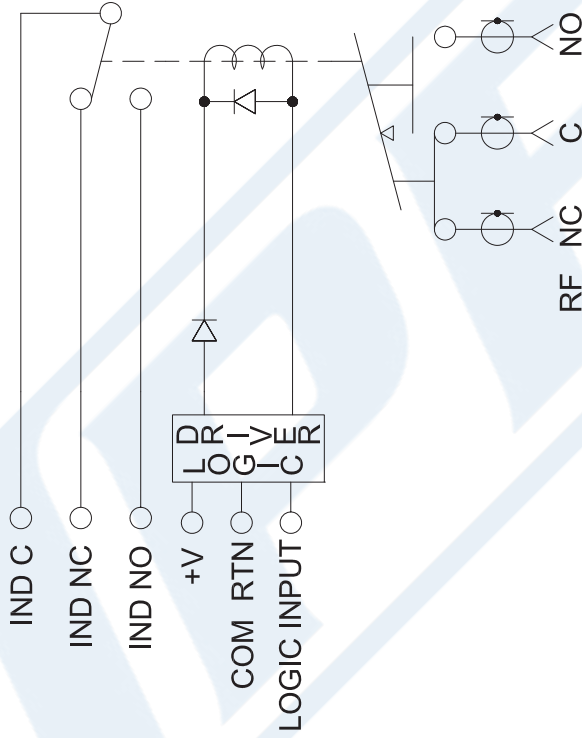
SIZE A

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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].

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SCHEMATIC FAILSAFE IN NORMALLY CLOSED POSITION

DWG TITLE

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