



## SPDT Electromechanical Relay Failsafe Switch DC to 18 GHz, SMA, 20 Watts, 28V Control

### Electromechanical Relay Switches Technical Data Sheet

PE71S6327

#### Features

- Single Pole Double Throw (SPDT) Relay Switch
- DC to 18 GHz Frequency Range
- 1M Cycle Operating Life Min
- Failsafe Actuator
- Insertion Loss 0.4 dB max
- Isolation 60 dB min
- 20 Watts Avg Power Max
- Switching Sequence Break Before Make

#### Applications

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

#### Description

The PE71S6327 is a Single Pole Double Throw (SPDT) RF Coaxial Relay Switch that operates from DC to 18 GHz and can handle up to 20 Watts of CW input power at 18 GHz in a Break Before Make condition. The design features a Failsafe Actuator and is rated for 1M Life Cycles. Insertion Loss is specified from 0.4 dB max and Isolation from 60 dB min, with +28 Vdc operating voltage. Performance is guaranteed over -55°C to +85°C. The package interface uses solder terminals and SMA female connectors.

#### Electrical Specifications

Switch Type	SPDT, Reflective
Actuator Type	Failsafe
Switching Sequence	Break Before Make

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		135		mA
Input Power (CW) (18 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		GHz
VSWR, Max	1.25:1	1.25:1	1.3:1	1.35:1		
Insertion Loss, Max	0.2	0.25	0.3	0.4		dB
Isolation, Min	80	75	70	60		dB

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 Failsafe Switch DC to 18 GHz, SMA, 20 Watts, 28V Control PE71S6327](#)



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### Mechanical Specifications

#### Size

Length	1.25 in [31.75 mm]
Width/Diameter	1.25 in [31.75 mm]
Height	0.5 in [12.7 mm]
Weight	0.172 lbs [78.02 g]
Body Material and Plating	Aluminum, Nickel
Package Type	Connectorized
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
Control Connector	Solder Pin

### Environmental Specifications

#### Temperature

Operating Range	-55 to +85 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



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

### Plotted and Other Data

Notes:

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 Failsafe Switch DC to 18 GHz, SMA, 20 Watts, 28V Control PE71S6327](#)

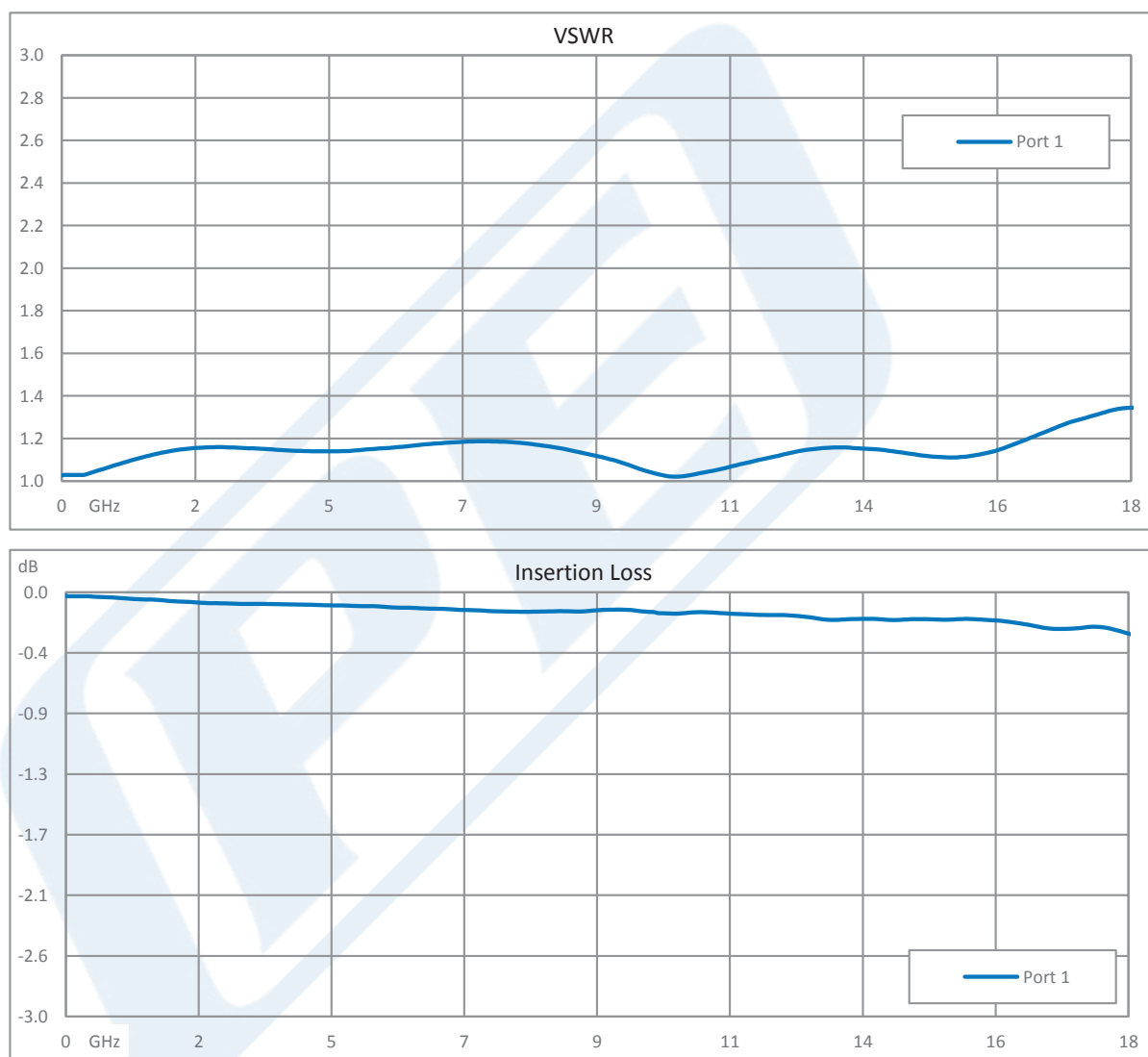


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### Electromechanical Relay Switches Technical Data

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#### Typical Performance Data



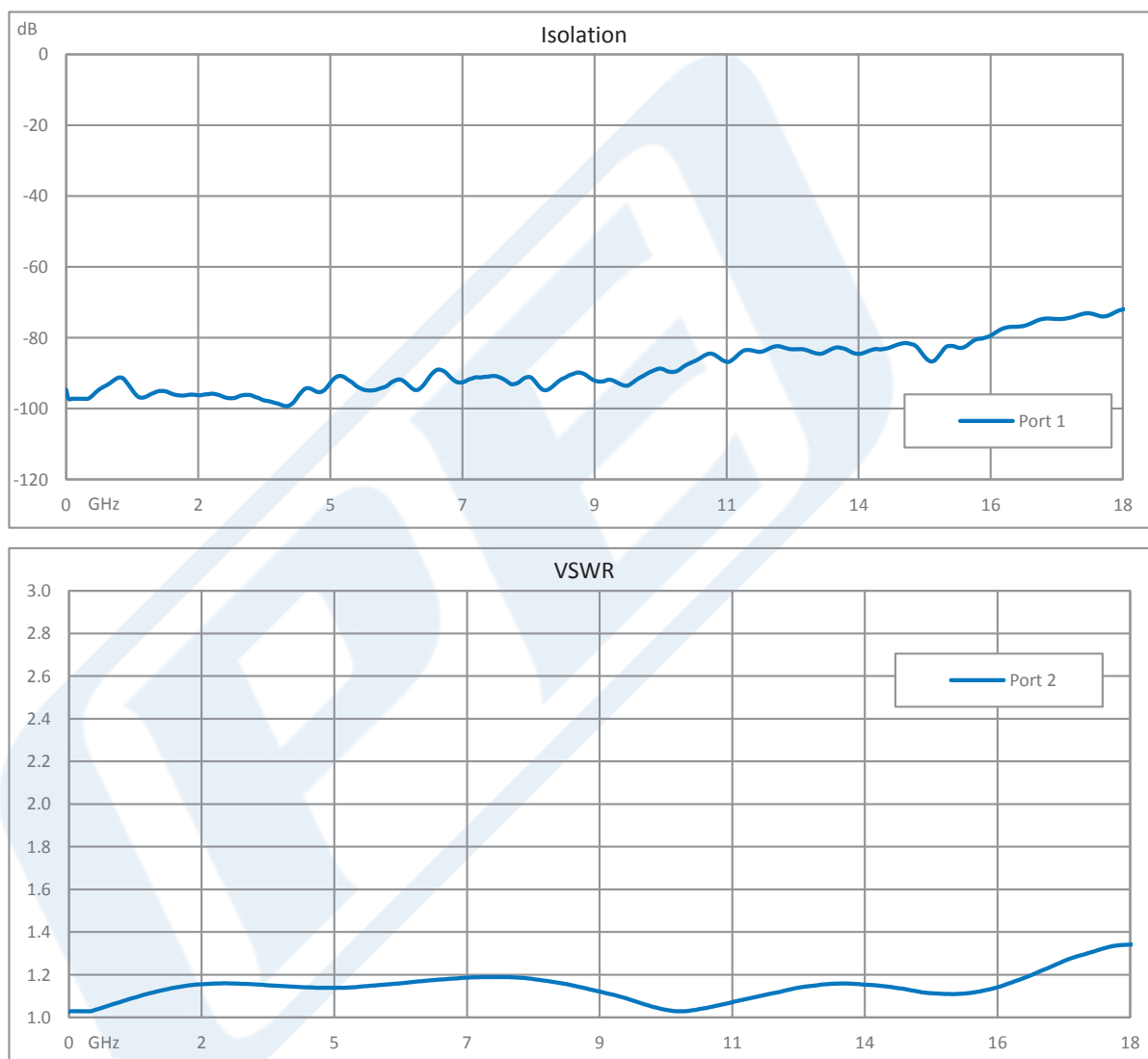
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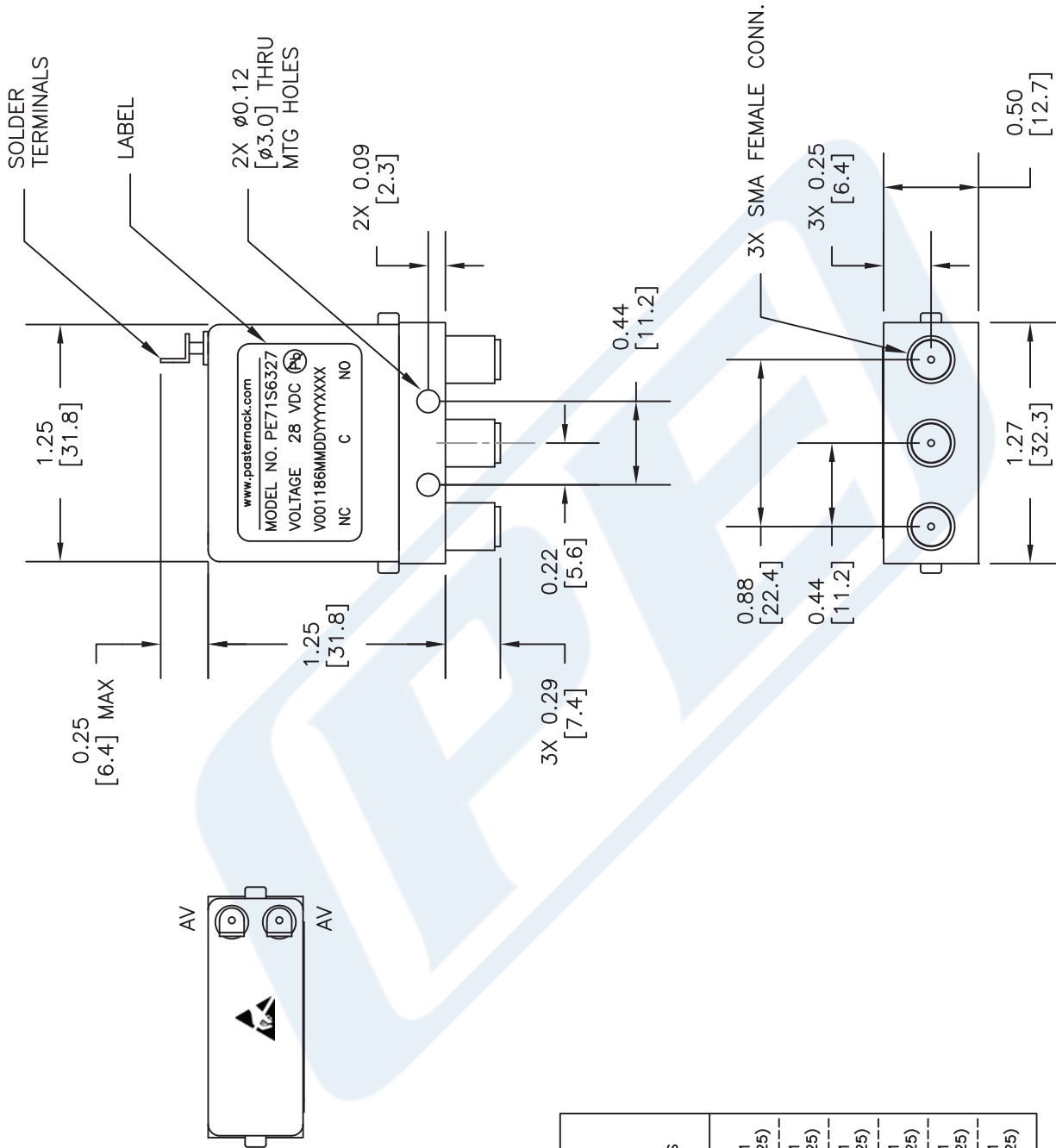


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# PE71S6327 CAD Drawing

SPDT Electromechanical Relay Failsafe Switch DC to  
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		ANGLES ±1°	FRACTIONS ±1/16
DECIMALS			
.XX ± .03 (0.76)			
.XXX ± .010 (0.254)			
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.

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

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DWG TITLE

**PE71S6327**

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 120815

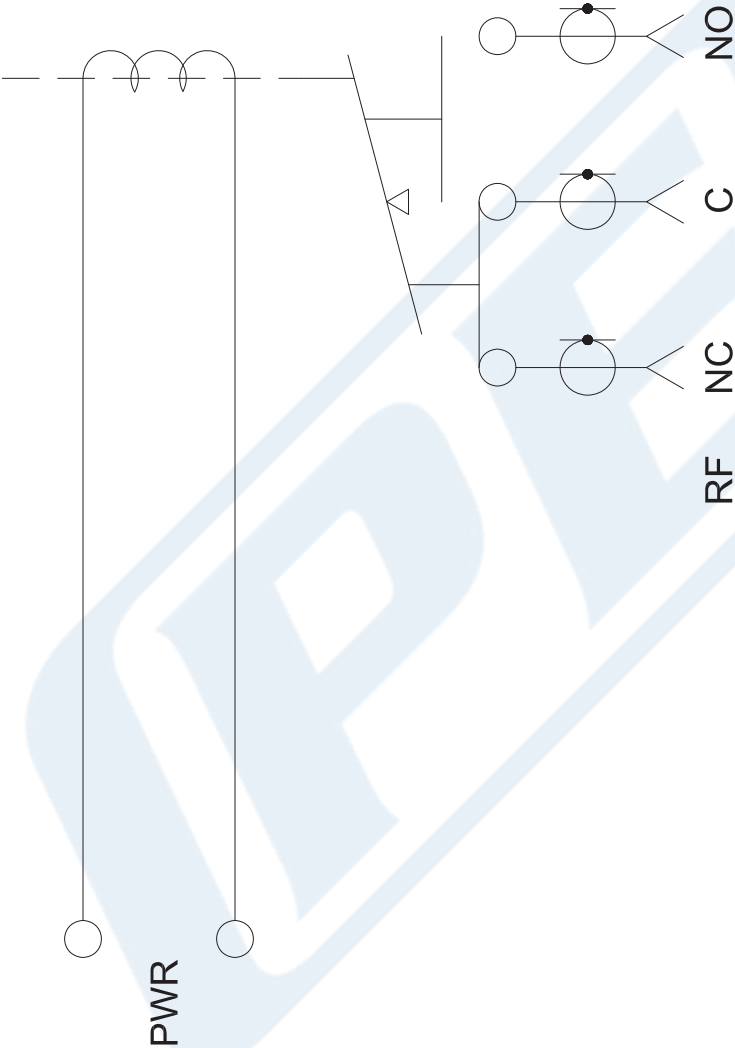
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SIZE A

2233

PE71S6327 CAD Drawing

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SCHEMATIC FAILSAFE SHOWN IN DE-ENERGIZED POSITION

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