



SPDT Electromechanical Relay Latching Switch DC to 12.4 GHz,
N, 160 Watts, 28V Control, Indicators, TTL, Diodes, Self Cut Off

Electromechanical Relay Switches Technical Data Sheet

PE71S6165

Features

- Single Pole Double Throw Relay Switch
- DC to 12.4 GHz Frequency Range
- 1M Cycle Min Operating Life
- Latching Actuator
- Self Cut Off, TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.6 dB max
- Isolation 60 dB min
- 160 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation

Description

The PE71S6165 is a Single Pole Double Throw Electromechanical Relay Switch that operates from DC to 12.4 GHz and has a rating of 160 Watts input power (CW) 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 80 dB min, with +28 Vdc operating voltage and performance is guaranteed over -55°C to +85°C. The package interface uses solder terminals and N Female connectors.

Electrical Specifications

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		120		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	60			dB
Input Power (CW) (at 12.4 GHz)			160	Watts

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 Latching Switch DC to 12.4 GHz, N, 160 Watts, 28V Control, Indicators, TTL, Diodes, Self Cut Off PE71S6165](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	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

Size

Length	2.2 in [55.88 mm]
Width/Diameter	2.46 in [62.48 mm]
Height	0.9 in [22.86 mm]
Weight	0.53 lbs [240.4 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	20 ms Max

Connectors

RF Connector Type	N 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 in approved ESD Workstation.



Environmental Specification Notes:
Designed to meet MIL-DTL-3928

Compliance Certifications (visit www.Pasternack.com for current document)

Not RoHS Compliant

Plotted and Other Data

Notes:

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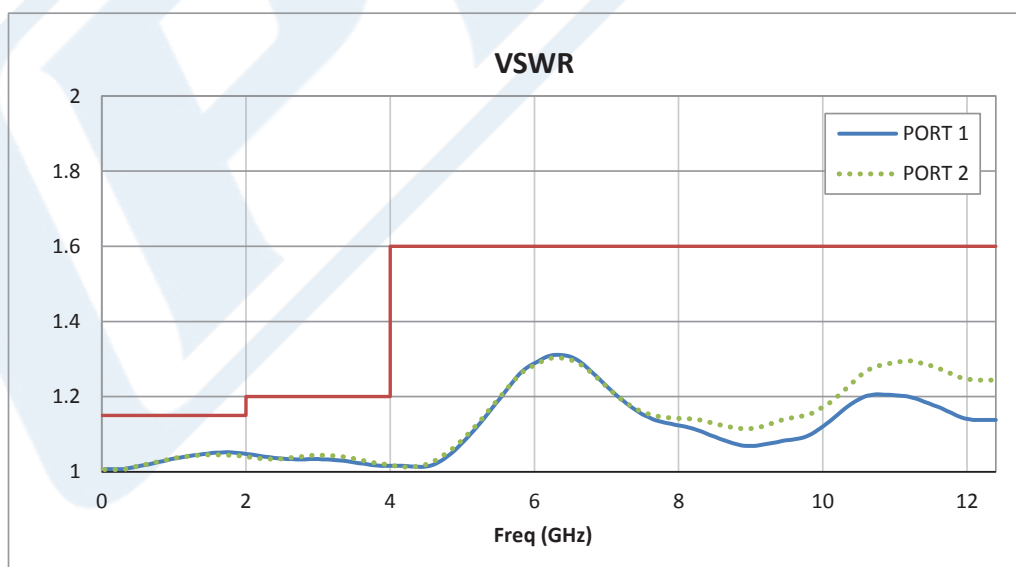
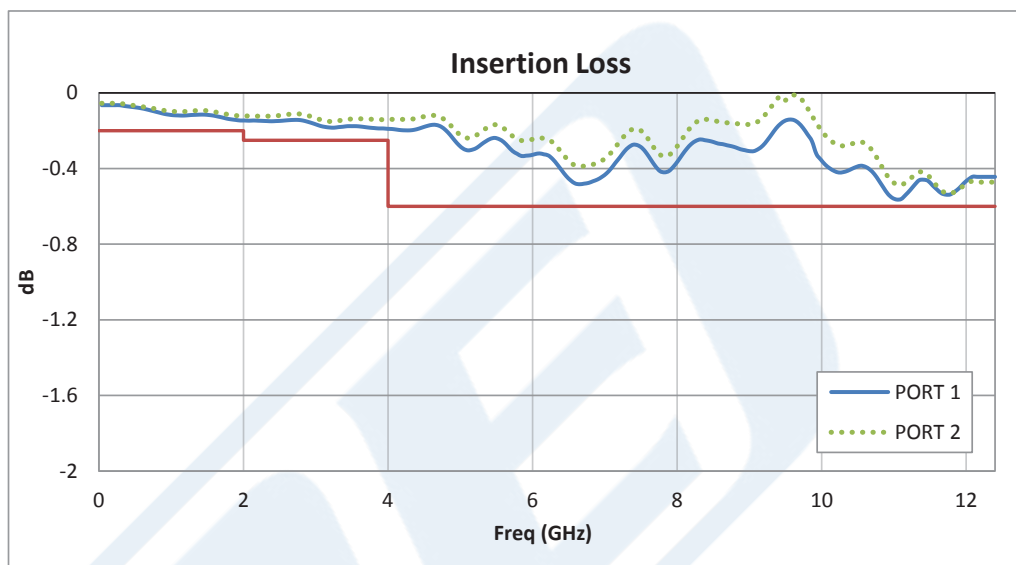


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Typical Performance Data



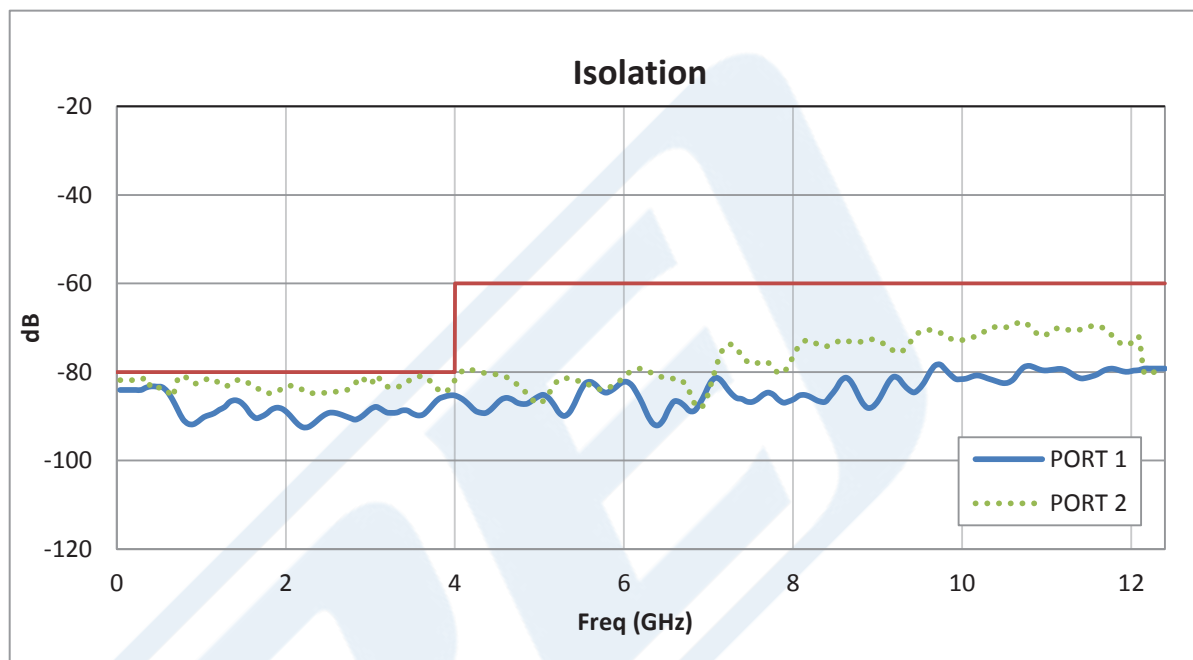
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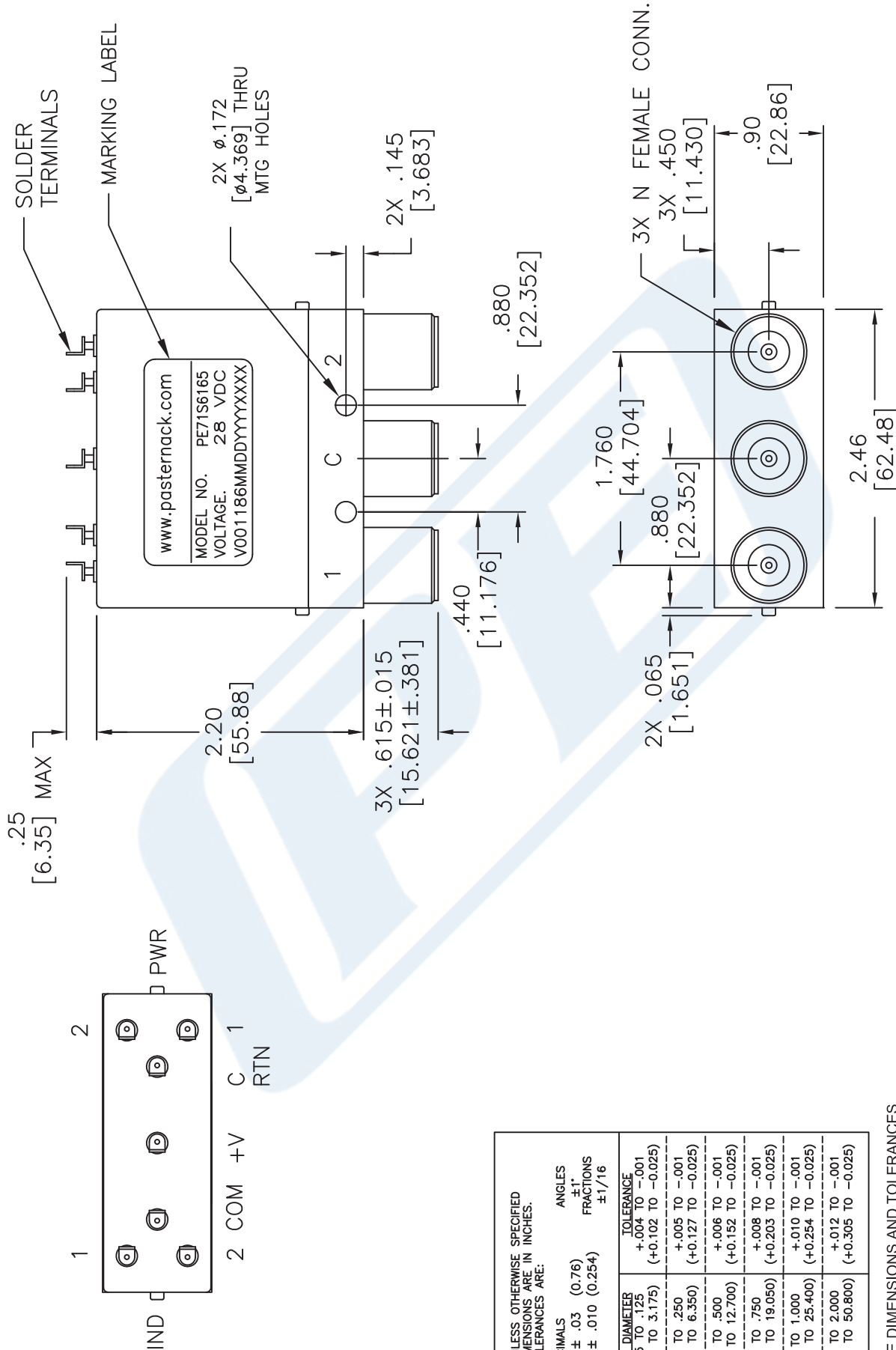
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PE71S6165 CAD Drawing

SPDT Electromechanical Relay Latching Switch DC to 12.4 GHz, N,
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* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE71S6165

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 010516

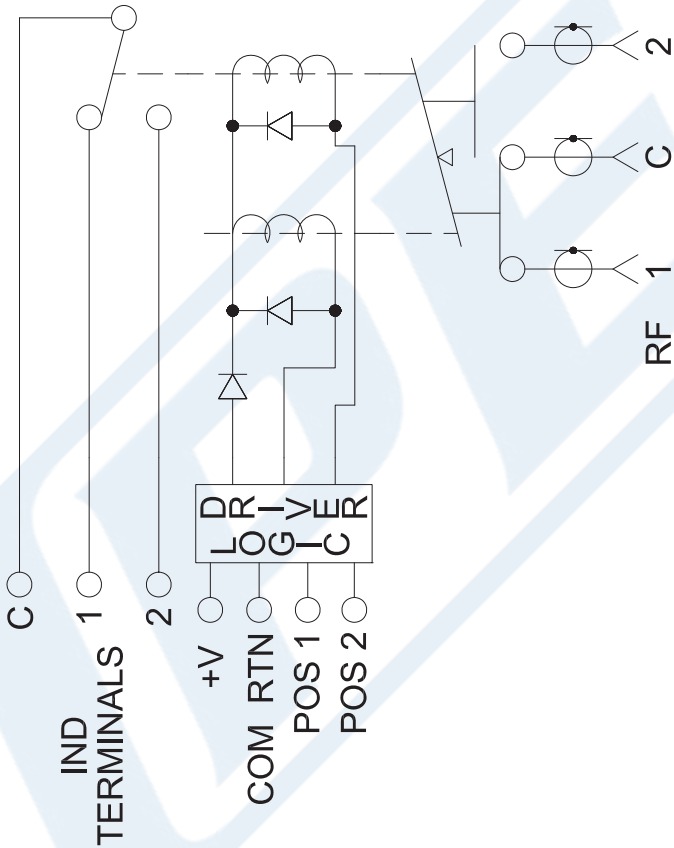
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SIZE A

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PE71S6165 CAD Drawing

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SCHEMATIC LATCHING SHOWN IN POSITION 1

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P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com