



SP10T Electromechanical Relay Normally Open
Switch DC to 8 GHz, SMA, 55 Watts, 28V Control

Electromechanical Relay Switches Technical Data Sheet

PE7160

Features

- SP10T Switch
- DC to 8GHz Frequency Range
- 1M Cycles Min Lifetime
- Normally Open Switch
- -30 to +70 Deg C Operating Temperature
- Insertion Loss 0.25 dB Max
- VSWR 1.3:1 Max
- +28 Vdc Operating Voltage

Applications

- Test & Measurement
- Instrumentation

Description

The PE7160 is a Single Pole Ten Throw Electromechanical Relay Switch that operates from DC to 8 GHz and can handle up to 120 Watts of CW input power. This design features a Normally Open Actuator and is rated for 1M Life Cycles. Insertion loss is specified from 0.15 dB max and Isolation from 70 dB min, with +20 Vdc operating voltage. Performance is guaranteed over -30 deg C to +70 deg C, and the switch assembly is RoHS and REACH compliant. The package interface uses solder terminals and SMA female connectors.

Electrical Specifications

Switch Type	SP10T, Reflective
Actuator Type	Normally Open
Pickup Voltage	20 Volts
Dropout Voltage	2 Volts

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Operating Voltage	24	28	32	Volts
Actuating Current @ 28 Volts			113	mA
VSWR			1.3:1	
Insertion Loss			0.25	dB
Isolation	65			dB
Input Power (CW)			55	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP10T Electromechanical Relay Normally Open Switch DC to 8 GHz, SMA, 55 Watts, 28V Control PE7160](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 4	4 to 8			GHz
VSWR, Max	1.2:1	1.3:1	1.3:1			
Insertion Loss, Max	0.15	0.2	0.25			dB
Isolation, Min	70	65	65			dB
Input Power, Typ (CW)	120	85	55			Watts

Mechanical Specifications

Size

Length	2.12 in [53.85 mm]
Width/Diameter	2.25 in [57.15 mm]
Height	2.25 in [57.15 mm]
Weight	0.474 lbs [215 g]
Body Material and Plating	Aluminum, Black Anodized
Package Type	Connectorized Module
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 Terminals

Mechanical Specification Notes:

RF Connector mating requirements per MIL-C-39012

Environmental Specifications

Temperature

Operating Range	-30 to +70 deg C
Storage Range	-55 to +100 deg C

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

RoHS Compliant	
REACH Compliant	12/17/2014

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: [SP10T Electromechanical Relay Normally Open Switch DC to 8 GHz, SMA, 55 Watts, 28V Control PE7160](#)

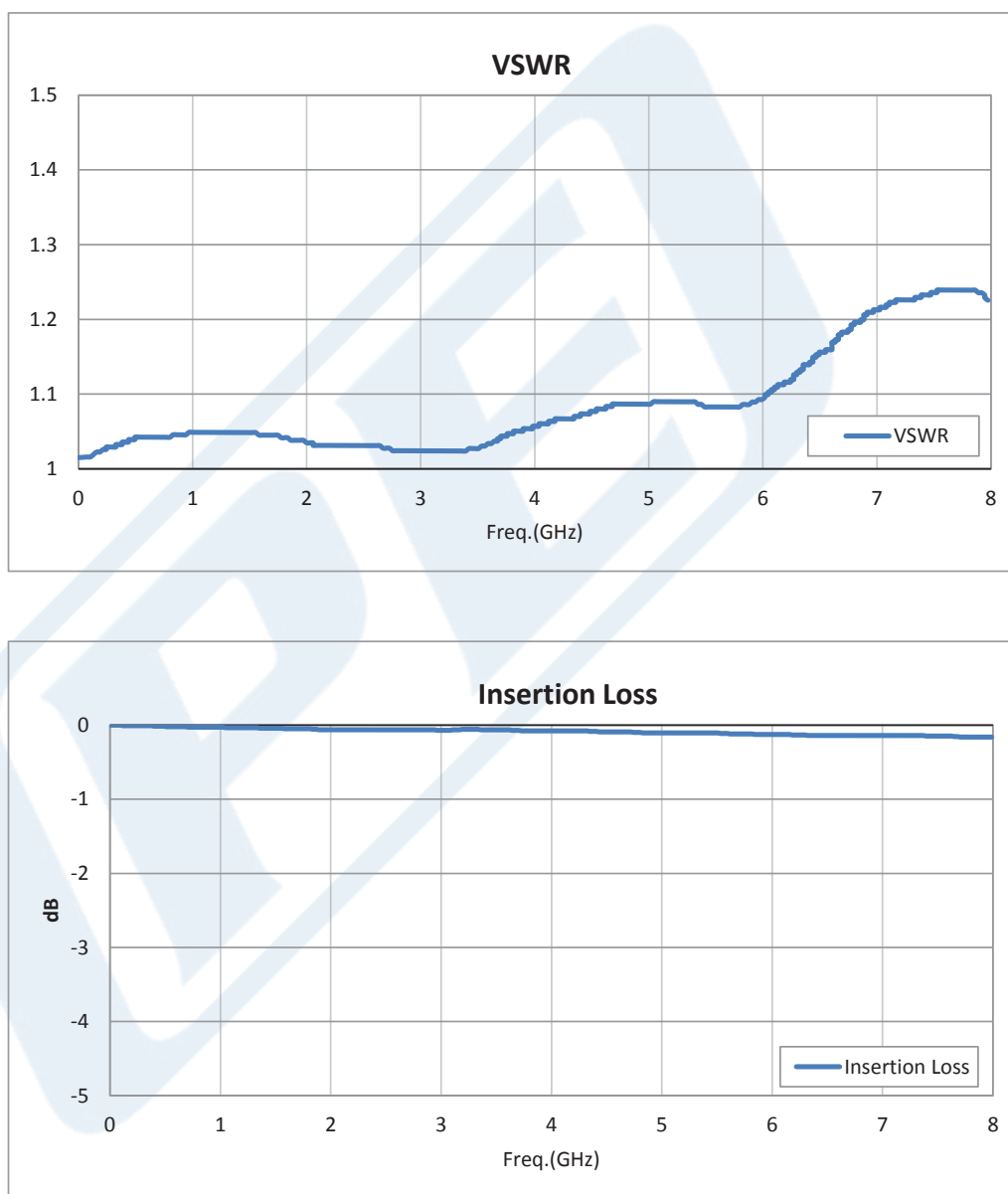


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Typical Performance Data



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SP10T Electromechanical Relay Normally Open Switch DC to 8 GHz, SMA, 55 Watts, 28V Control 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SP10T Electromechanical Relay Normally Open Switch DC to 8 GHz, SMA, 55 Watts, 28V Control PE7160](http://www.pasternack.com/sma-electromechanical-sp10t-switch-8ghz-55watts-24-32volts-f-n-pe7160-p.aspx)

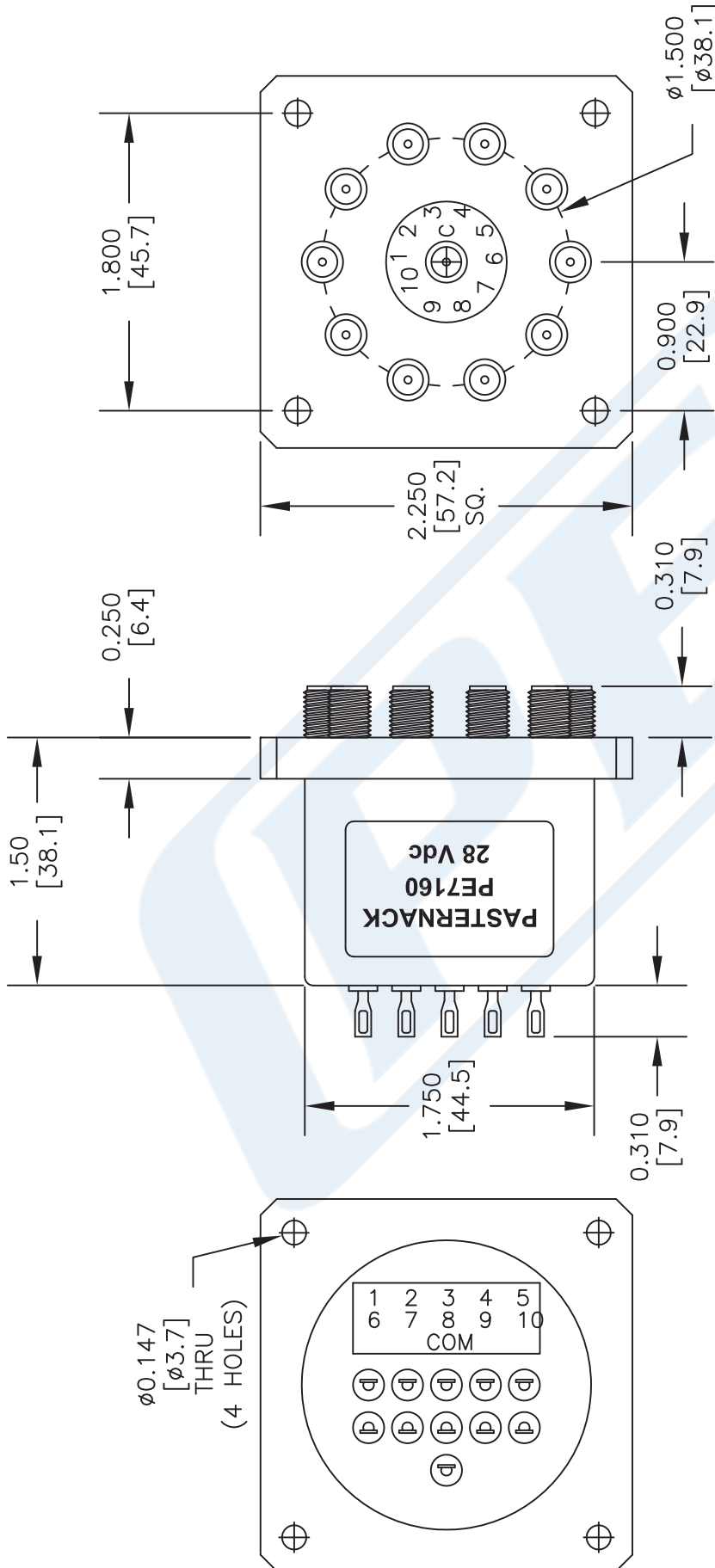
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE7160 CAD Drawing

SP10T Electromechanical Relay Normally Open Switch

DC to 8 GHz, SMA, 55 Watts, 28V Control



DWG TITLE

PE7160

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

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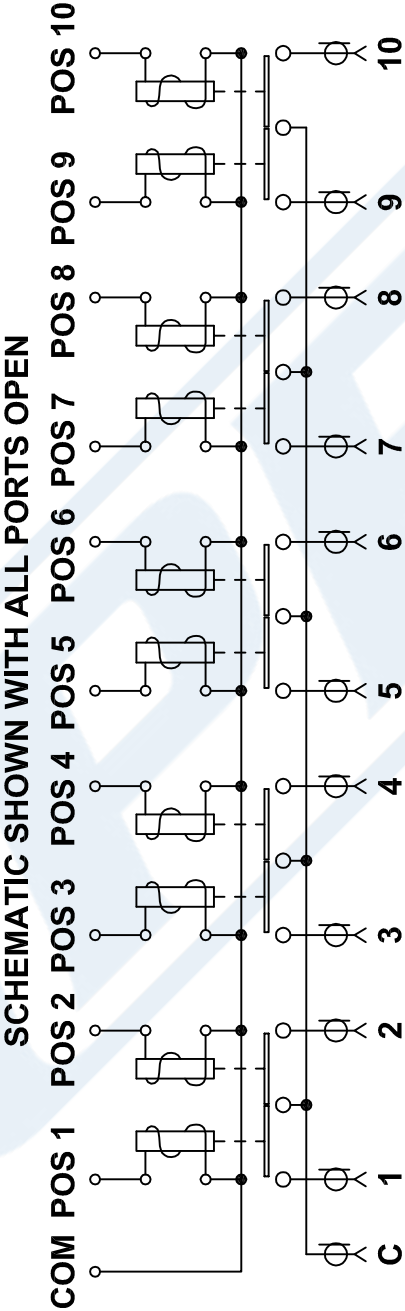
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THE ENGINEER'S RF SOURCE

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