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SP4T Electromechanical Relay Normally Open Switch DC to 18 GHz, SMA, 35 Watts, 28V Control

Electromechanical Relay Switches Technical Data Sheet PE7158

Features

- SP4T Switch
- DC to 18GHz Frequency Range
- 1M Cycles Min Lifetime
- Normally Open Switch
- -40 to +85 Deg C Operating Temperature
- Insertion Loss 0.5 dB Max
- VSWR 1.5:1 Max
- +28 Vdc Operating Voltage

Applications

- Test & Measurement
- Instrumentation

Description

The PE7158 is a Single Pole Four Throw Electromechanical Relay Switch that operates from DC to 18 GHz and can handle up to 85 Watts of CW input power. This design features a Normally Open Actuator and is rated for 1M Life Cycles. Insertion loss is specified from 0.2 dB max and Isolation from 80 dB min, with +20 Vdc operating voltage. Performance is guaranteed over -40 deg C to +85 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	SP4T, Reflective
Actuator Type	Normally Open
Pickup Voltage	20 Volts
Dropout Voltage	2 Volts

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage	22	28	30	Volts
Actuating Current @ 28 Volts			115	mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			dB
Input Power (CW)			35	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SP4T Electromechanical Relay Normally Open Switch DC to 18 GHz, SMA, 35 Watts, 28V Control PE7158

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8	8 to 12.4	12.4 to 18		GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1		
Insertion Loss, Max	0.2	0.3	0.4	0.5		dB
Isolation, Min	80	70	60	60		dB
Input Power, Typ (CW)	85	55	45	35		Watts

Mechanical Specifications

Size

Length	2.37 in [60.2 mm]
Width/Diameter	1.75 in [44.45 mm]
Height	1.75 in [44.45 mm]
Weight	0.28 lbs [127.01 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	-40 to +85 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:

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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SP4T Electromechanical Relay Normally Open Switch DC to 18 GHz, SMA, 35 Watts, 28V Control PE7158

URL: http://www.pasternack.com/sma-electromechanical-sp4t-switch-18ghz-35watts-22-30volts-f-n-pe7158-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.

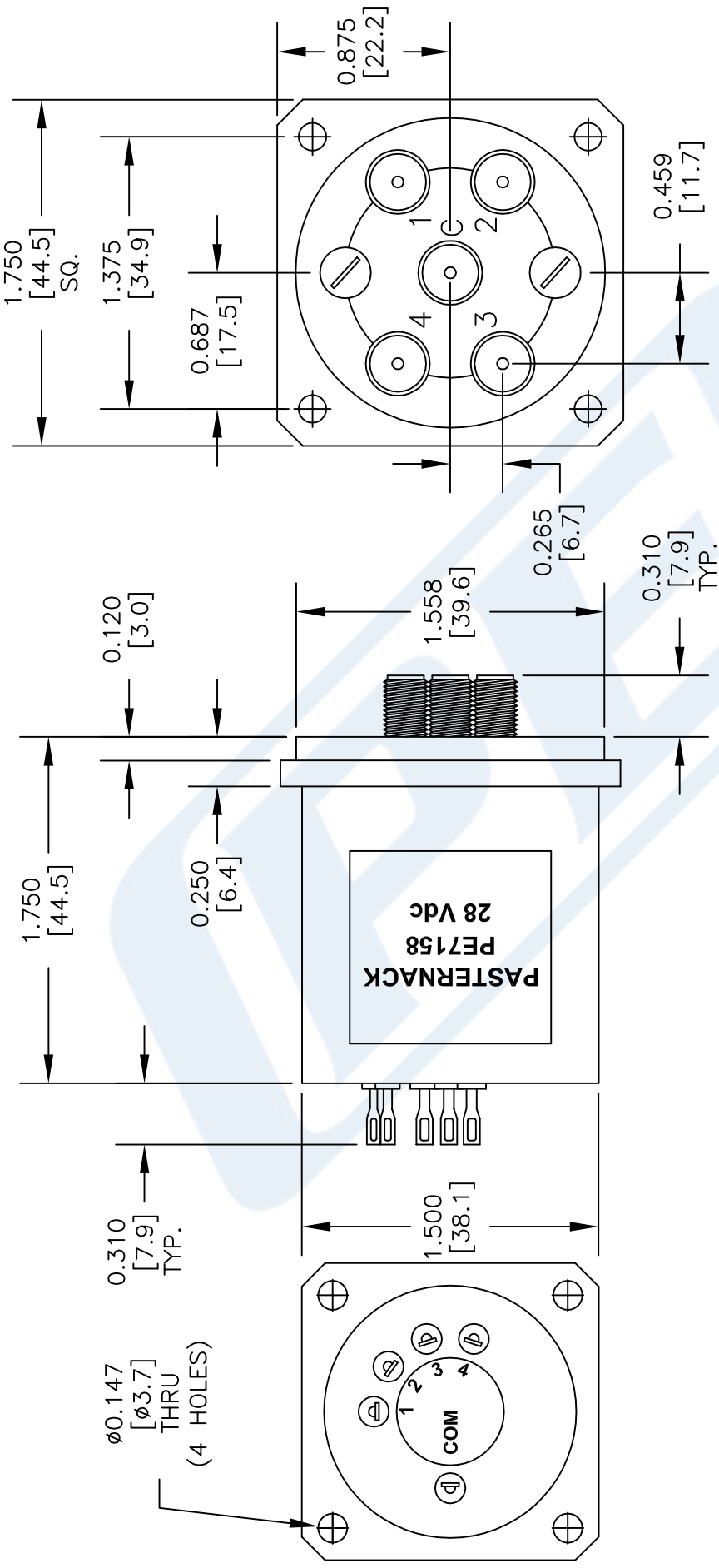
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PE7158 CAD Drawing

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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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DWG TITLE: PE7158

FSCM NO. 53919

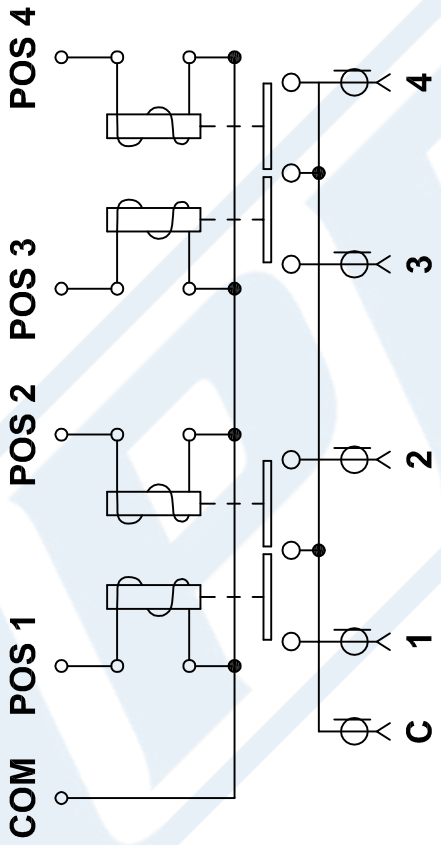
150

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PE7158 CAD Drawing

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SCHEMATIC SHOWN WITH
ALL PORTS OPEN

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DWG TITLE **PE7158**

CAD FILE 090915 | SCALE N/A | SIZE A | 150

FSCM NO. 53919

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