



Transfer Electromechanical Relay Latching Switch
DC to 18 GHz, SMA, 35 Watts, 175V Indicator,
28V Control with Indicators, Self Cut Off

Electromechanical Relay Switches Technical Data Sheet

PE7151

Features

- Transfer Switch
- DC to 18GHz Frequency Range
- 1M Cycles Min Lifetime
- Latching Switch
- Make before Break
- -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 PE7151 is a Transfer Electromechanical Relay Switch that operates from DC to 18 GHz and can handle up to 85 Watts of CW input power in a Make Before Break condition. This design features a Latching Actuator with Indicators and Self Cut Off and is rated for 1M Life Cycles. Insertion loss is specified from 0.2 dB max and Isolation from 80 dB min, with +21 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	Transfer, Reflective
Actuator Type	Latching
Switching Sequence	Make before Break
Actuator Options	Indicators, Self Cut Off
Pickup Voltage	21 Volts
Indicator Rating	5 Watts / 175 Volts / 250 mA

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage	24	28	32	Volts
Actuating Current @ 28 Volts			185	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: [Transfer Electromechanical Relay Latching Switch DC to 18 GHz, SMA, 35 Watts, 175V Indicator, 28V Control with Indicators, Self Cut Off PE7151](#)



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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	65	60		dB
Input Power, Typ (CW)	85	55	45	35		Watts

Mechanical Specifications

Size

Length	2.63 in [66.8 mm]
Width/Diameter	2.16 in [54.86 mm]
Height	1.36 in [34.54 mm]
Weight	0.309 lbs [140.16 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

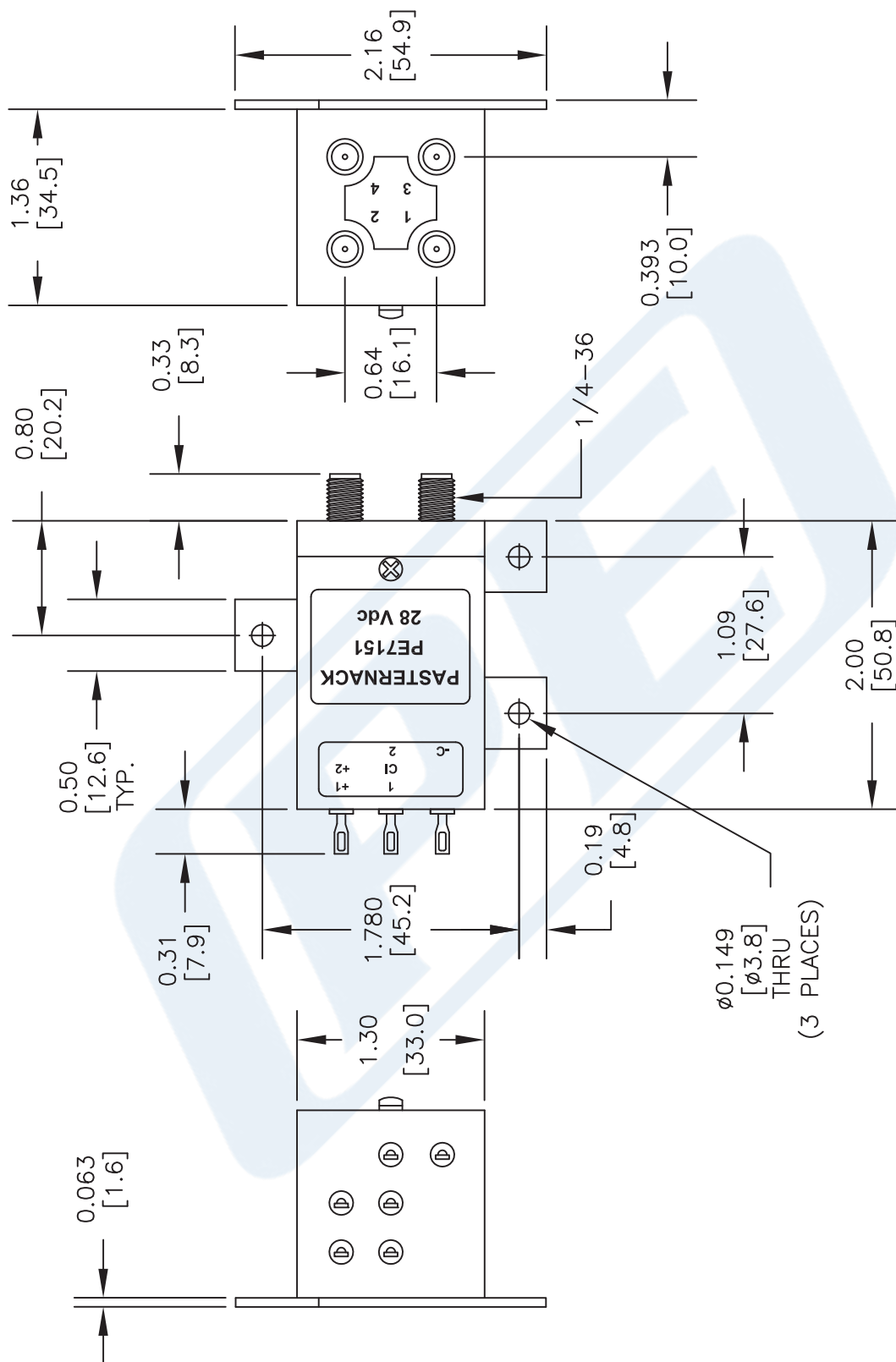
Plotted and Other Data

Notes:

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PE7151 CAD Drawing

Transfer Electromechanical Relay Latching Switch DC to 18 GHz, SMA,
35 Watts, 175V Indicator, 28V Control with Indicators, Self Cut Off



DWG TITLE

PE7151

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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FSCM NO. 53919

CAD FILE 090815

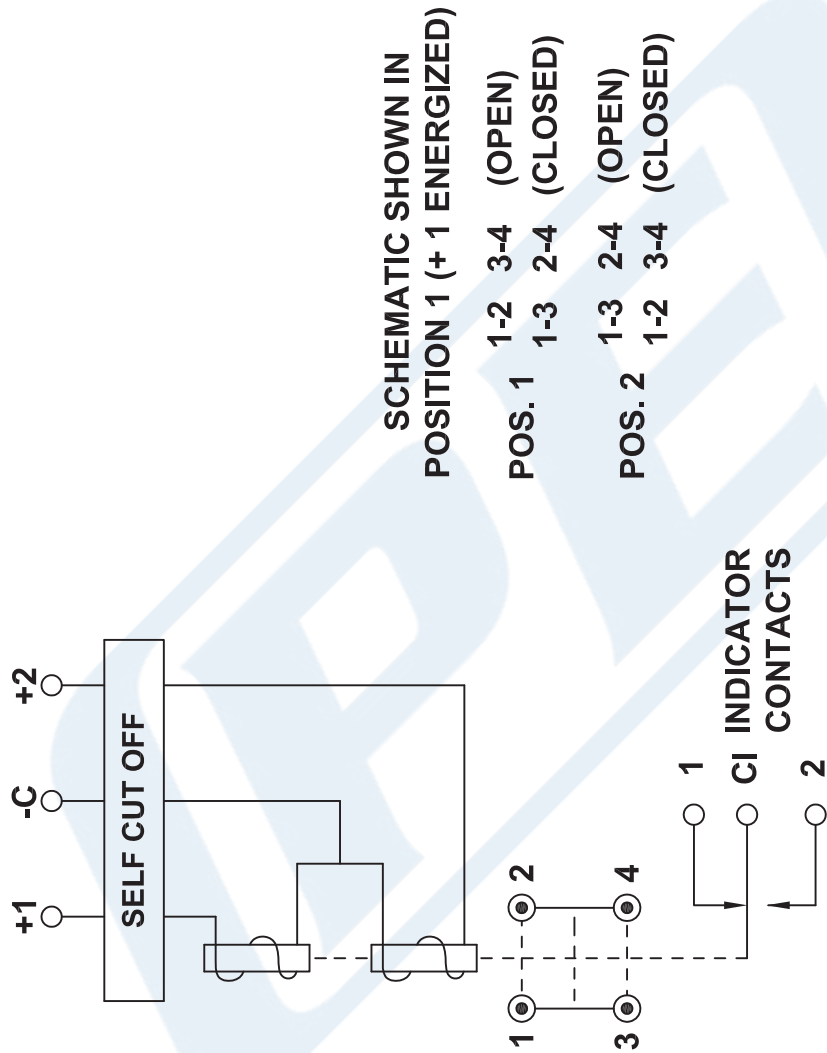
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SIZE A

150

PE7151 CAD Drawing

Transfer Electromechanical Relay Latching Switch DC to 18 GHz, SMA,
35 Watts, 175V Indicator, 28V Control with Indicators, Self Cut Off



SCHEMATIC SHOWN IN
POSITION 1 (+ 1 ENERGIZED)

POS. 1 1-2 3-4 (OPEN)
 1-3 2-4 (CLOSED)

POS. 2 1-3 2-4 (OPEN)
 1-2 3-4 (CLOSED)

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