



Transfer Electromechanical Relay Latching
 Switch DC to 12.4 GHz, N, 50 Watts, 28V Control,
 Indicators, TTL, Self Cut Off, Diodes

Electromechanical Relay Switches Technical Data Sheet

PE71S6173

Features

- Transfer 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 0.4 dB max
- Isolation 60 dB min
- 50 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation

Description

The PE71S6173 is a Transfer Electromechanical Relay Switch that operates from DC to 12.4 GHz and has a rating of 50 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 -25°C to +65°C. The package interface uses solder terminals and N Female connectors.

Electrical Specifications

Switch Type	Transfer, Reflective
Actuator Type	Latching
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Self Cut Off, Diodes
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		135		mA
VSWR			1.45:1	
Insertion Loss			0.4	dB
Isolation	60			dB
Input Power (CW) (at 12.4 GHz)			50	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 12.4 GHz, N, 50 Watts, 28V Control, Indicators, TTL, Self Cut Off, Diodes PE71S6173](#)



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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			GHz
VSWR, Max	1.2:1	1.3:1	1.45:1			
Insertion Loss, Max	0.2	0.3	0.4			dB
Isolation, Min	80	70	60			dB

Mechanical Specifications

Size

Length	2.06 in [52.32 mm]
Width/Diameter	2 in [50.8 mm]
Height	2 in [50.8 mm]
Weight	0.875 lbs [396.89 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	-25 to +65 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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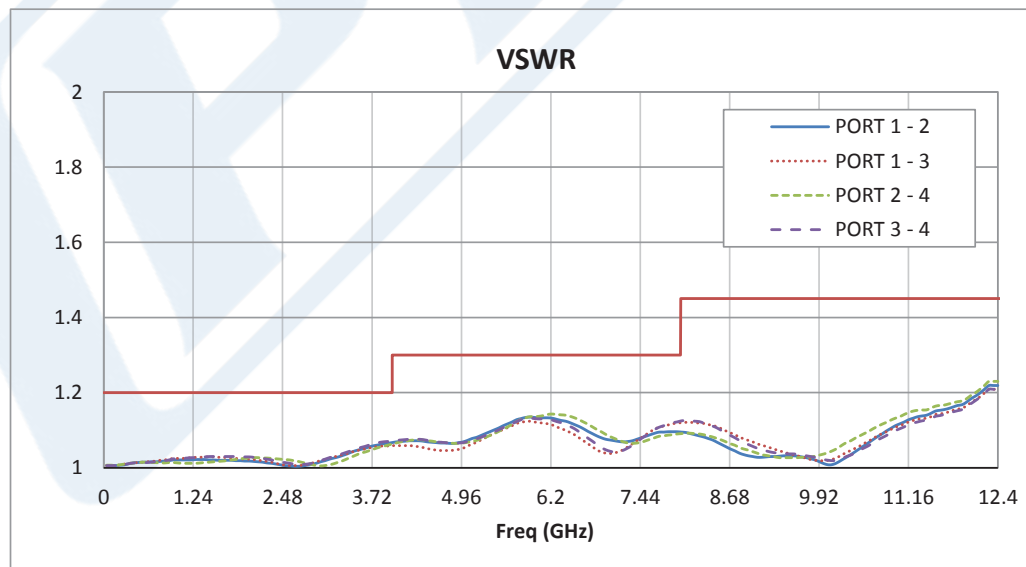
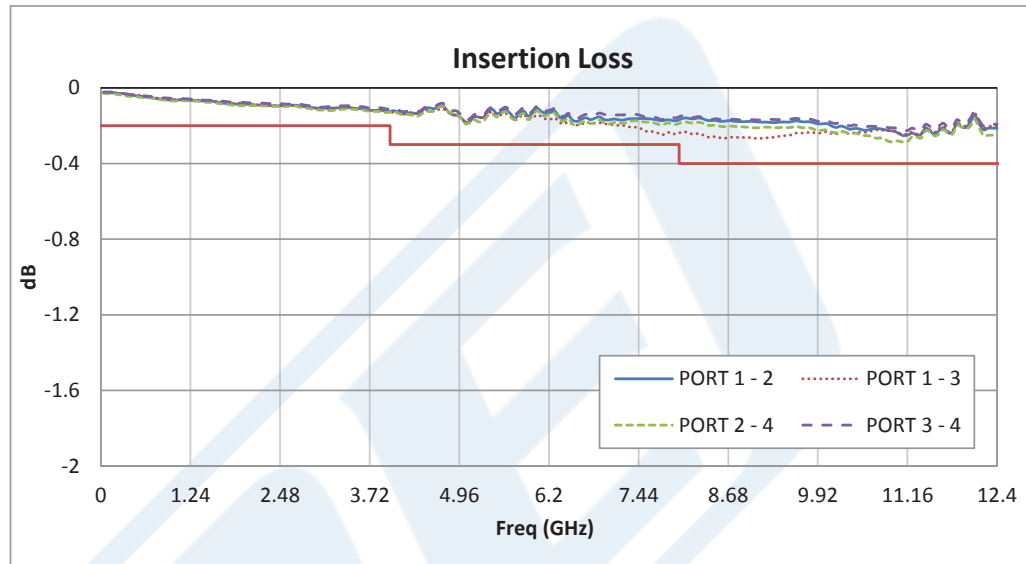


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Typical Performance Data



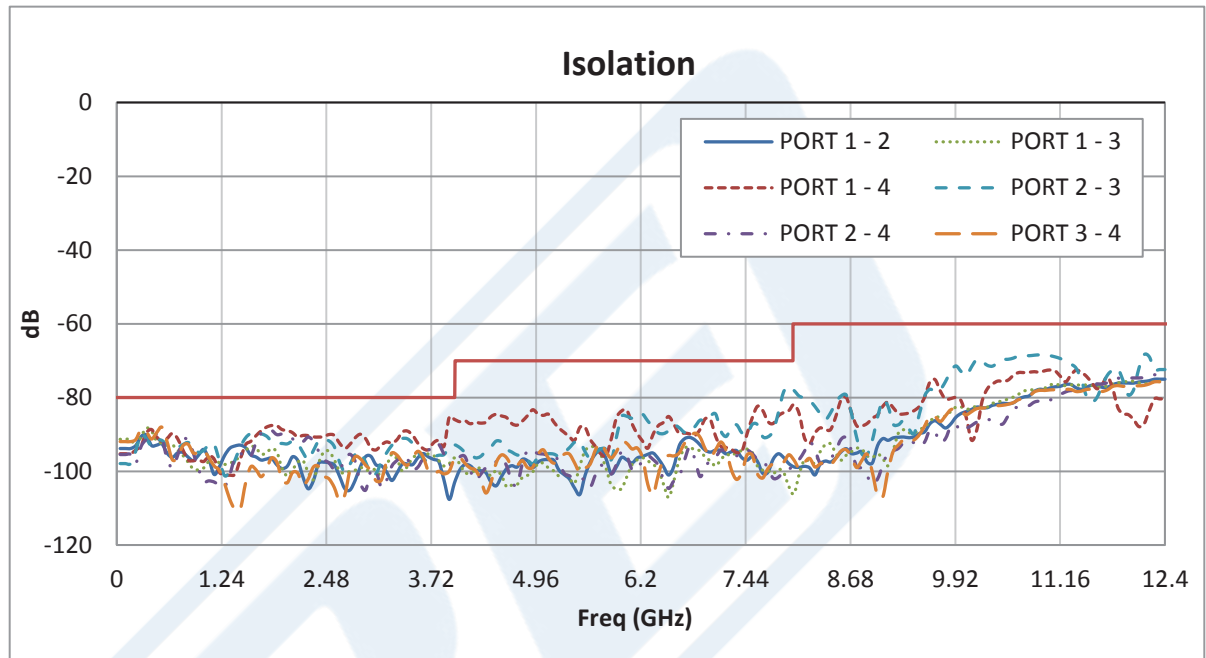
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Transfer Electromechanical Relay Latching Switch DC to 12.4 GHz, N, 50 Watts, 28V Control, Indicators, TTL, Self Cut Off, Diodes from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

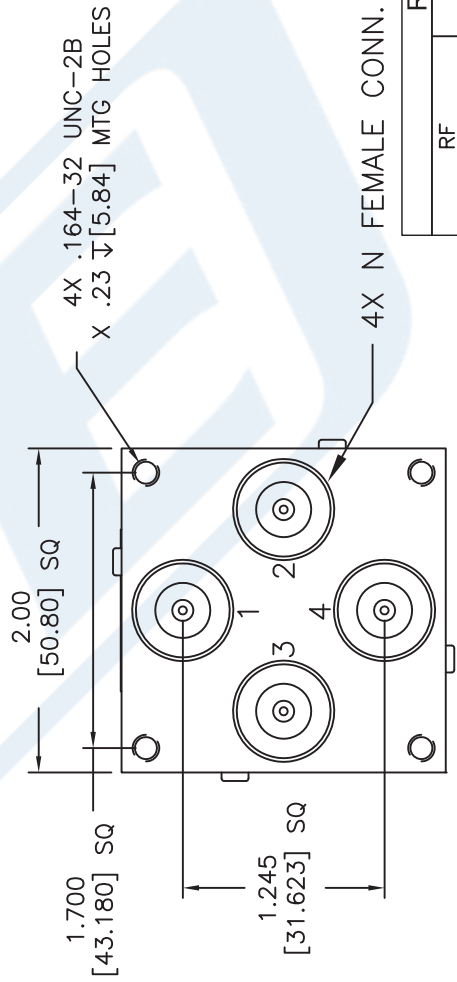
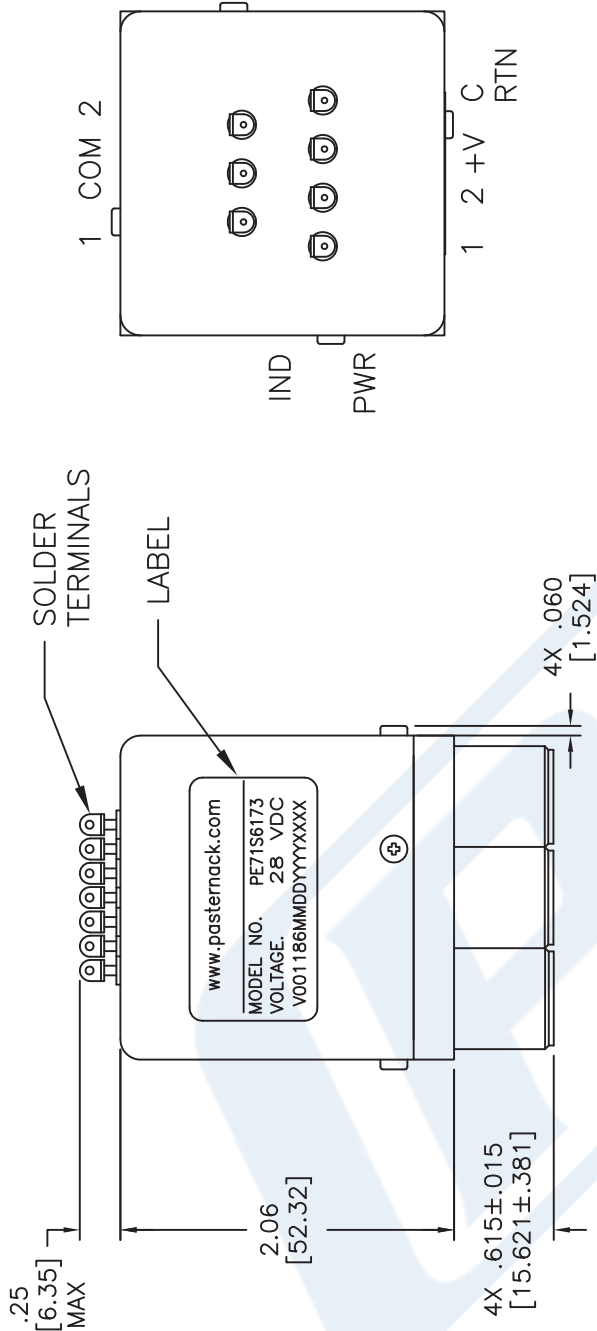
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PE71S6173 CAD Drawing

Transfer Electromechanical Relay Latching Switch DC to 12.4 GHz, N,
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RF STATUS	
RF	FAILSAFE
1-3, 2-4	DE-ENERGIZED
1-2, 3-4	ENERGIZED
	LATCHING
	POSITION 1
	POSITION 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:	
DECIMALS	ANGLES
.XX ± .03 (0.76)	±1°
.XXX ± .010 (0.254)	FRACTIONS
	±1/16
HOLE DIAMETER	TOLERANCE
.0135 TO .125	+ .004 TO -.001
(0.343 TO 3.175)	(+0.102 TO -0.025)
.126 TO .250	+ .005 TO -.001
(3.200 TO 6.350)	(+0.127 TO -0.025)
.251 TO .500	+ .006 TO -.001
(6.375 TO 12.700)	(+0.152 TO -0.025)
.501 TO .750	+ .008 TO -.001
(12.725 TO 19.050)	(+0.203 TO -0.025)
.751 TO 1.000	+ .010 TO -.001
(19.075 TO 25.400)	(+0.254 TO -0.025)
1.001 TO 2.000	+ .012 TO -.001
(25.425 TO 50.800)	(+0.305 TO -0.025)

* THESE DIMENSIONS AND TOLERANCES SUPERSSEDE NOTE #1 ON TITLE BLOCK.

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].

DWG TITLE
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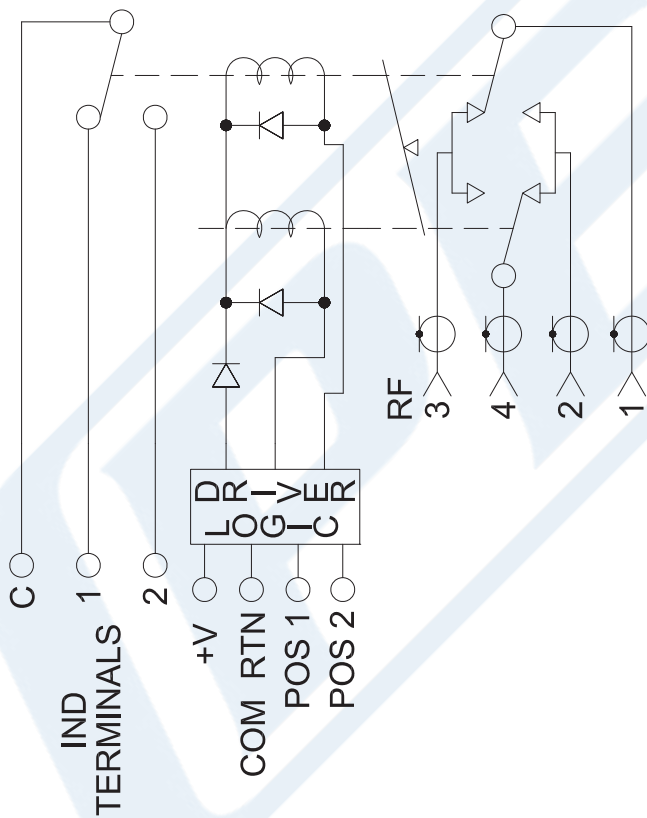
PE PASTERNAK
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

CAD FILE	042715	SCALE	N/A	SIZE	A	2233
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FSCM NO. 53919

PE71S6173 CAD Drawing

Transfer Electromechanical Relay Latching Switch DC to 12.4 GHz, N,
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SCHEMATIC LATCHING SHOWN IN POSITION 1

DWG TITLE

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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