



## Transfer Electromechanical Relay Failsafe Switch DC to 40 GHz, 2.92mm, 5 Watts, 28V Control

### Electromechanical Relay Switches Technical Data Sheet

PE71S6119

#### Features

- Transfer Relay Switch
- DC to 40 GHz Frequency Range
- 1M Cycle Min Operating Life
- Failsafe Actuator
- Insertion Loss 0.9 dB max
- Isolation 50 dB min
- 5 Watts Avg Power Max
- Switching Sequence Break Before Make

#### Applications

- Test & Measurement
- Communications System
- Instrumentation

#### Description

The PE71S6119 is a Transfer Electromechanical Relay Switch that operates from DC to 40 GHz and has a rating of 5 Watts input power (CW) in a Break Before Make condition. The design features a Failsafe Actuator and is rated for 1M Life Cycles for high reliability operation. Insertion loss is specified from 0.3 dB max and Isolation from 70 dB min, with +28 Vdc operating voltage and performance is guaranteed over -35°C to +85°C. The package interface uses solder terminals and 2.92mm Female connectors.

#### Electrical Specifications

Switch Type	Transfer, Reflective
Actuator Type	Failsafe
Switching Sequence	Break Before Make

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage	24	28	30	Volts
Actuating Current @ 28 Volts			300	mA
VSWR			2:1	
Insertion Loss			0.9	dB
Isolation	50			dB
Input Power (CW) (at 40 GHz)			5	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 Failsafe Switch DC to 40 GHz, 2.92mm, 5 Watts, 28V Control PE71S6119](#)



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### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12	12 to 18	18 to 26.5	26.5 to 40	GHz
VSWR, Max	1.3:1	1.4:1	1.5:1	1.7:1	2:1	
Insertion Loss, Max	0.3	0.4	0.5	0.7	0.9	dB
Isolation, Min	70	60	60	55	50	dB

### Mechanical Specifications

#### Size

Length	1.76 in [44.7 mm]
Width/Diameter	1.26 in [32 mm]
Height	1.26 in [32 mm]
Weight	0.209 lbs [94.8 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	2.92mm Female
RF Connector Specification	MIL-PRF-39012
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	-35 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](http://www.Pasternack.com) for current document)  
Not RoHS Compliant

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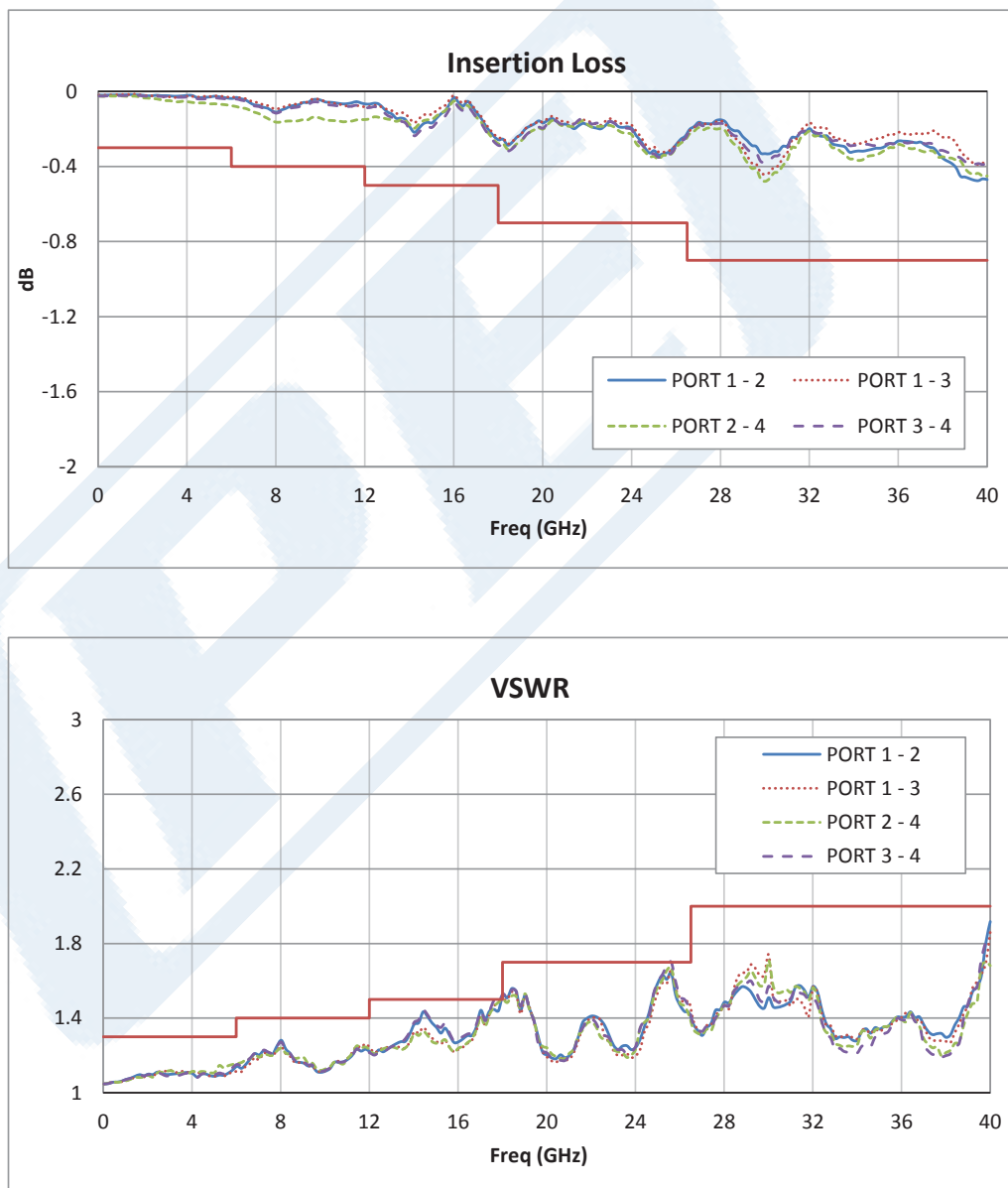
## Electromechanical Relay Switches Technical Data

PE71S6119

### Plotted and Other Data

Notes:

#### Typical Performance Data



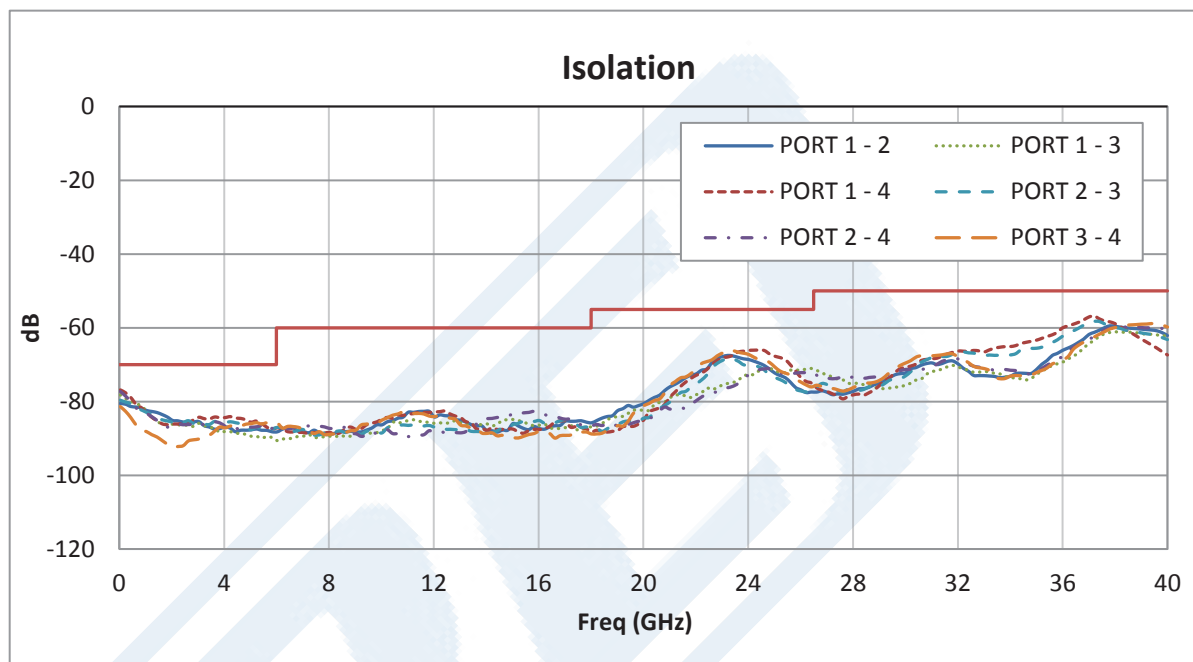
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Transfer Electromechanical Relay Failsafe Switch DC to 40 GHz, 2.92mm, 5 Watts, 28V Control from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

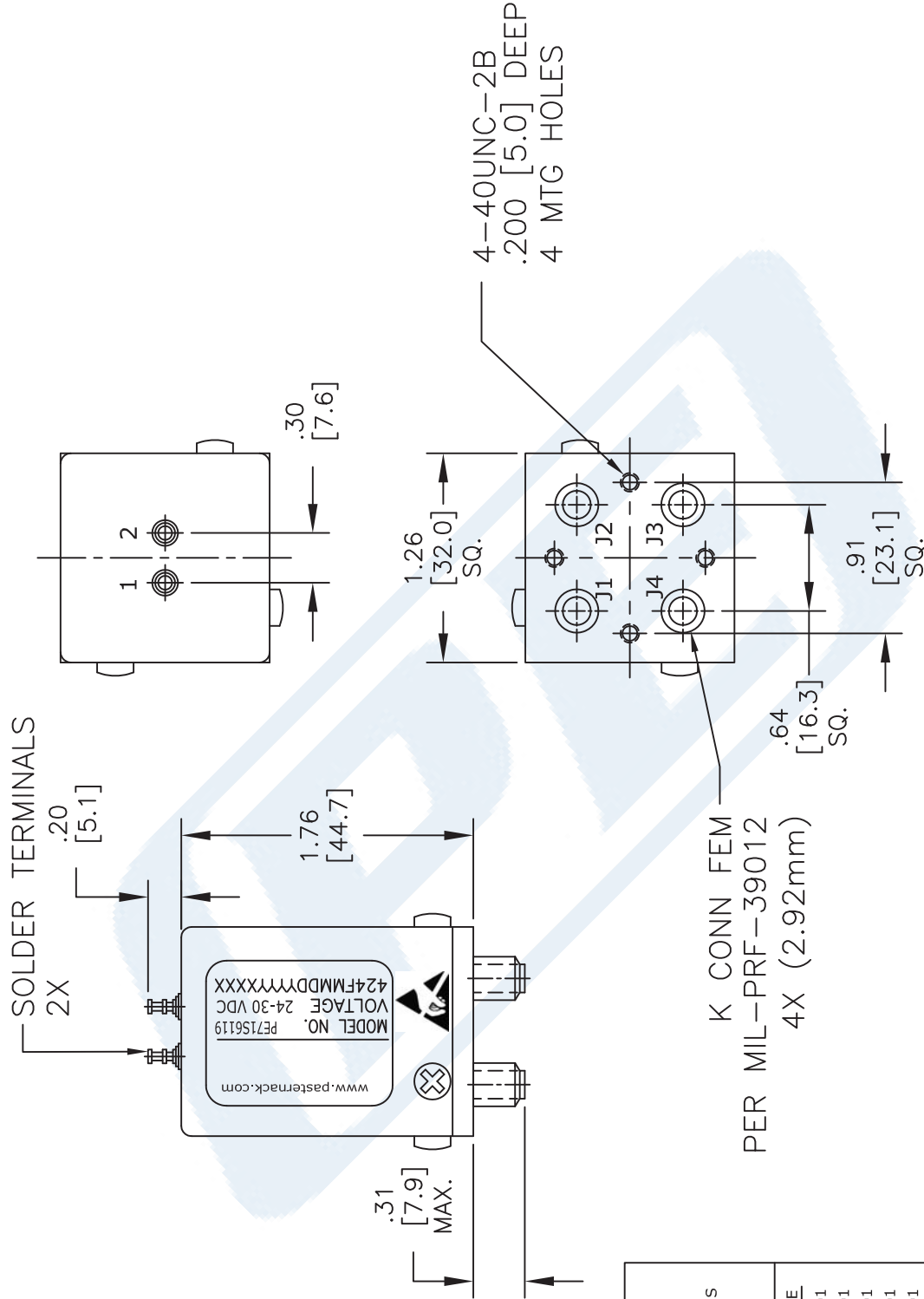
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Transfer Electromechanical Relay Failsafe Switch DC to 40 GHz, 2.92mm, 5 Watts, 28V Control PE71S6119](http://www.pasternack.com/2.92mm-transfer-electromechanical-relay-switch-40-ghz-failsafe-pe71s6119-p.aspx)

URL: <http://www.pasternack.com/2.92mm-transfer-electromechanical-relay-switch-40-ghz-failsafe-pe71s6119-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.

# PE71S6119 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC  
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		
DECIMALS	ANGLES	FRACTIONS
.XX ± .03	± 1°	± 1/16
.XXX ± .010		
HOLE DIAMETER	TOLERANCE	
.0135 TO .125	+.004/- .001	
.126 TO .250	+.005/- .001	
.251 TO .500	+.006/- .001	
.501 TO .750	+.008/- .001	
.751 TO 1.000	+.010/- .001	
1.001 TO 2.000	+.012/- .001	

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

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE

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DWG TITLE

**PE71S6119**

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].  
4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.

FSCM NO. 53919

CAD FILE 022515

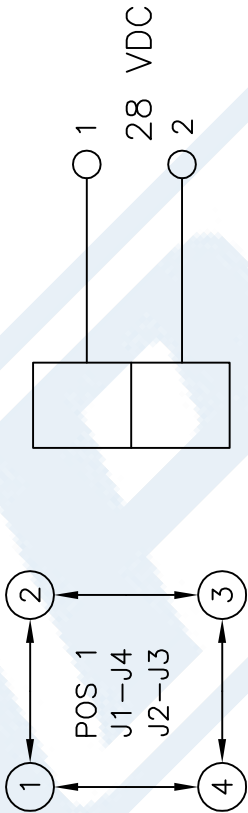
SCALE N/A

SIZE A

150

PE71S6119 CAD Drawing

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FAILSAFE SCHEMATIC SHOWN IN DE-ENERGIZED POSITION

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150

SIZE A

SCALE N/A

CAD FILE 022515

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