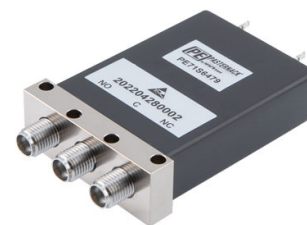


SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, 10W, 28V, Indicators, TTL, 2.92 mm



PE71S6479

Features

- Single Pole Double Throw (SP2T) Electromechanical Relay Switch
- DC to 40 GHz Frequency Range
- Failsafe Actuator
- TTL Logic Control
- Suppression Diodes
- Indicators
- 2M Lifecycle Rating
- Insertion Loss 0.4 dB typ
- Isolation > 85 dB typ
- VSWR as low as 1.15:1 max
- +28 Volt DC Bias
- Solder Terminal Pins for DC Command Control
- 2.92mm Female Connectors
- -25°C to +65°C Operating Temperature
- Up to 10 Watt Average Power Handling
- 50 Ohm Design
- Hot Switching Capability - Consult Factory
- S-Parameter Data available upon request
- Rugged Design meets Mil-STD-202 Test Conditions

Applications

- Aerospace & Defense
- Test & Measurement
- Microwave Radio Systems
- Military & Commercial Communication Systems
- Research & Development
- SATCOM
- Wireless Communications
- Enterprise
- IoT

Description

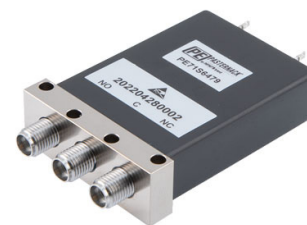
The PE71S6479 is a Single Pole Double Throw (SP2T) electromechanical relay switch that operates across a wide frequency range from DC to 40 GHz and can handle up to 10W of average power in a break before make condition. The 50 Ohm design is rated for 2 million lifecycles and features a Failsafe Actuator. Additional features include TTL control logic, suppression diodes which limit voltage spikes or reverse current, and indicators to monitor the switch position. Impressive typical performance includes 0.4 dB insertion loss and isolation greater than 85 dB. This switch requires +28Vdc bias voltage and operates over a temperature range of -25°C to +65°C. The rugged and compact package assembly supports 2.92mm female connectors and solder terminal pins for DC command control functions. And for highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for shock and random vibration.

Electrical Specifications (TA = +25°C, DC Voltage = 28 Vdc)

Switch Type	SPDT
Actuator Type	Failsafe
Actuator Options	Indicators, TTL Logic
TTL Control	on: 2.4 to 5.5 Volts off: 0 to 0.8 Volts
TTL Control Current	90 mA at 5.5 Volts 90 mA at 0.8 Volts

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts			90	mA
VSWR		1.3:1	1.5:1	
Insertion Loss		0.4	0.7	dB

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Description	Min	Typ	Max	Units
Isolation	60	85		dB
Input Power (CW) (at 40 GHz)			10	Watts
Switching Time			20	ms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12.4	12.4 to 18	18 to 26.5	26.5 to 40	GHz
VSWR, Max	1.15:1	1.35:1	1.4:1	1.4:1	1.5:1	
Insertion Loss, Max	0.2	0.3	0.4	0.5	0.7	dB
Isolation, Min	85	80	80	75	60	dB

Mechanical Specifications

Size

Length	2.05 in [52.07 mm]
Width/Diameter	1.5 in [38.1 mm]
Height	0.52 in [13.21 mm]
Weight	0.1 lbs [45.36 g]

Connectors

RF Connector Type	2.92mm Female
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Environmental Specifications

Temperature

Operating Range	-25 to +65 deg C
Storage Range	-55 to +100 deg C
Shock	MIL-STD-202 Method 213, Condition D, 500G (non oper)
Vibration	MIL-STD-202 Method 204, Condition D, 10G RMS (non oper)

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

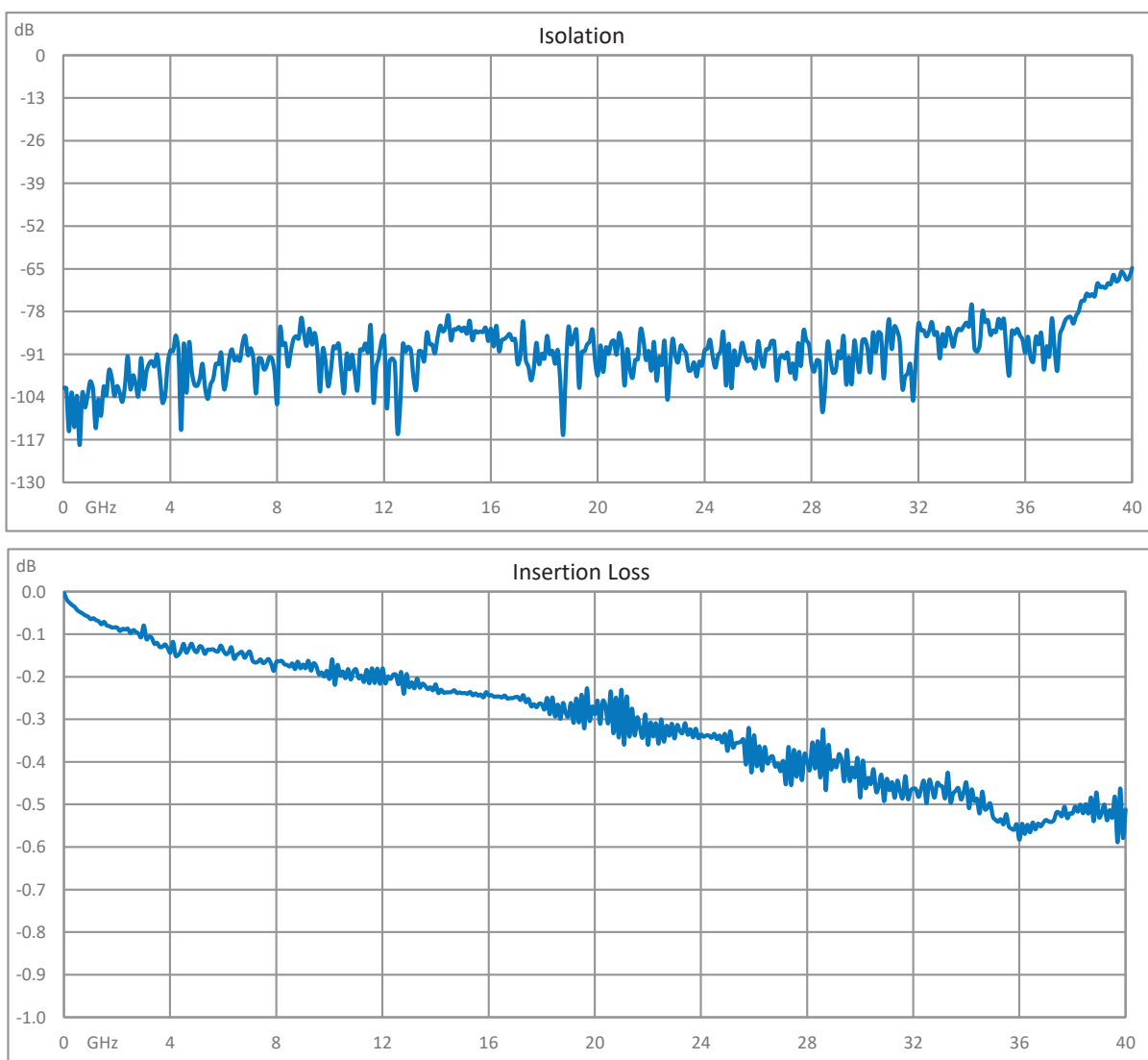
Notes:

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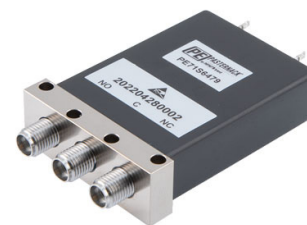


PE71S6479

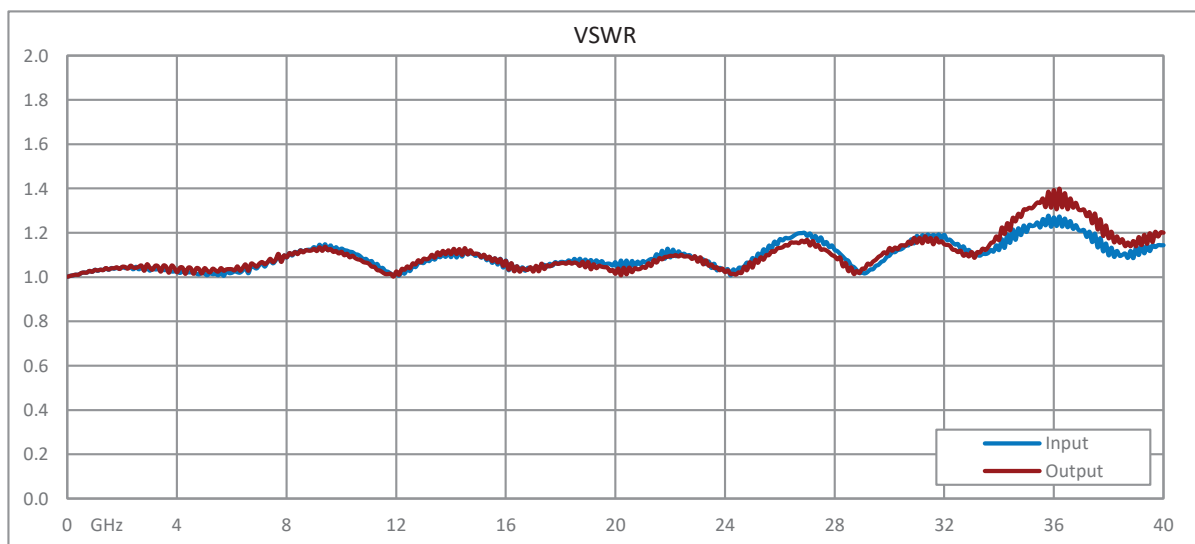
Typical Performance Data



SPDT Electromechanical Relay Failsafe Switch, DC
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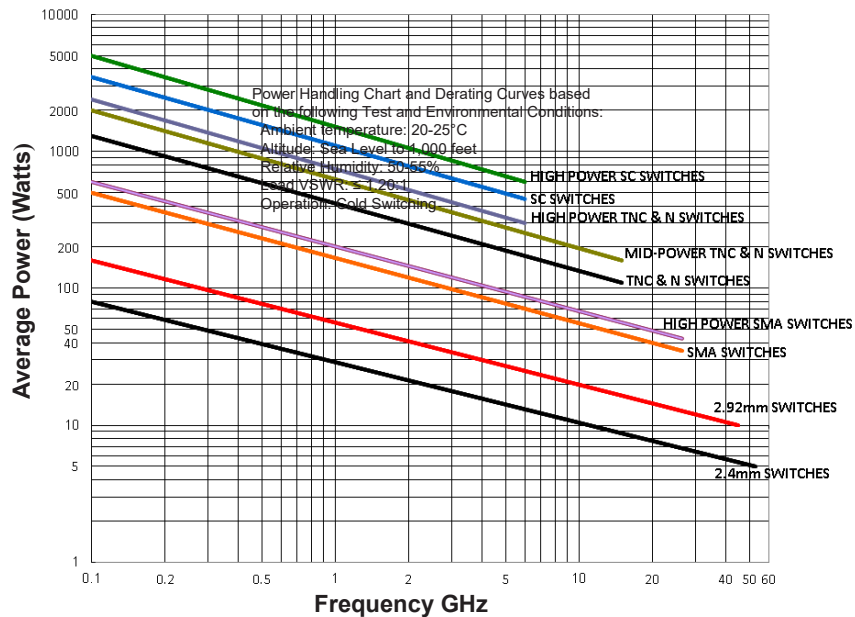
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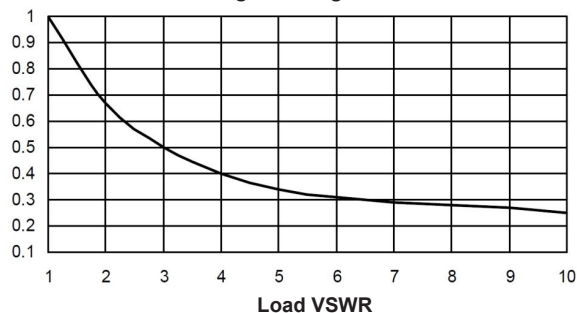
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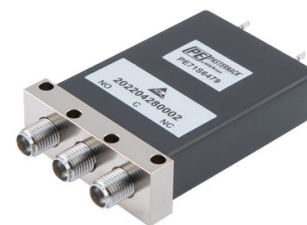


Power Handling De-rating vs. Load VSWR



Power Handling Chart and Derating Curves based on the following Test and Environmental Conditions:
Ambient temperature: 20-25°C
Altitude: Sea Level to 1,000 feet
Relative Humidity: 50-55%
Load VSWR: $\leq 1.20:1$
Operation: Cold Switching

SPDT Electromechanical Relay Failsafe Switch, DC
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SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, 10W, 28V, Indicators, TTL, 2.92 mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% 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: [SPDT Electromechanical Relay Failsafe Switch, DC to 40 GHz, 10W, 28V, Indicators, TTL, 2.92 mm PE71S6479](https://www.pasternack.com/spdt-electromechanical-relay-failsafe-switch-40-ghz-10w-28v-indicators-ttl-2.92mm-pe71s6479-p.aspx)

URL: <https://www.pasternack.com/spdt-electromechanical-relay-failsafe-switch-40-ghz-10w-28v-indicators-ttl-2.92mm-pe71s6479-p.aspx>

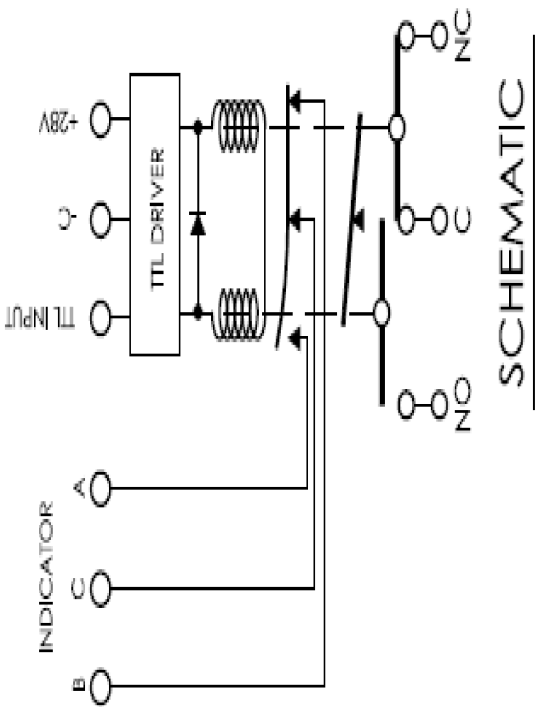
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PE71S6479 CAD Drawing

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS			THIRD-ANGLE PROJECTION		
TOLERANCES: .X = ±.2 [5.08] .XX = ±.02 [1.27] .XXX = ±.005 [0.127] CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +9% L / -0			THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED		
SHEET 2 OF 2			SCALE N/A		
REV A			REV A		
SIZE A			ITEM NO. PE71S6479		
CAGE CODE A 53919			DRAWN BY KGLEBOVA		
DRAWN BY KGLEBOVA			PASTERNACK an INFINITE® brand		
PASTERNACK Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com			PASTERNACK CORPORATION ALL RIGHTS RESERVED		

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