

## SP6T Electromechanical Relay Normally Open Switch, DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles



### PE71S6626

#### Features

- Single Pole Six Throw
- DC to 26.5 GHz Frequency Range
- Isolation greater than 50 dB minimum
- 2M Cycle Min Operating Life
- +12 Volt DC
- 90 Watt average Power
- Normally Open Actuator
- -25 to +65°C Operating Temperature
- Insertion Loss as low as 0.8 dB Max
- VSWR as low as 1.8:1 max
- SMA Female RF connectors
- Solder Terminals for DC Control
- Hot Switching Capability - Consult Factory
- S-Parameter Data available upon request

#### Applications

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

#### Description

The PE71S6626 is a Single Pole Six Throw (SP6T) electromechanical relay switch that operates across a wide frequency range of DC to 26.5 GHz and can handle up to 90 Watts of CW input power in a break before make condition. The 50 Ohm design is rated for 2M life cycles for high reliability operation and features a Normally Open actuator, which defaults to an open state when power is removed, allowing signal flow to be interrupted until actuated. Impressive performance includes insertion loss less than 0.8 dB maximum and isolation greater than 50 dB minimum. The Normally Open actuator requires +12 Vdc bias voltage, and operates over a temperature range of -25°C to +65°C. The rugged and compact package assembly supports SMA Female connectors and terminal solder pins for DC Control. 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 = 12 Vdc)

Switch Type	SP6T
Actuator Type	Normally Open
Switching Sequence	Make Before Break

Description	Min	Typ	Max	Units
Frequency Range	DC		26.5	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts			400	mA
400mA max @ 12V and 20°C				
VSWR			1.8:1	
Insertion Loss			0.8	
Isolation	50			dB
Input Power (CW)		90		Watts
(Average Power for Cold Switching (Reference RF Power Rating Table for Cold Switching))				
Switching Time		20		ms

SP6T Electromechanical Relay Normally Open Switch,  
DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles



## PE71S6626

### 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		GHz
VSWR, Max	1.25:1	1.4:1	1.5:1	1.8:1		
Insertion Loss, Max	0.2	0.4	0.5	0.8		dB
Isolation, Min	70	60	60	50		dB

### Mechanical Specifications

#### Size

Length	1.75 in [44.45 mm]
Width/Diameter	1.75 in [44.45 mm]
Height	1.75 in [44.45 mm]
Weight	1.76 lbs [798.32 g]
Finish	Electroless Nickel
Package Type	Connectorized
Operating Life	2,000,000 Cycles

#### Connectors

RF Connector Type	SMA Female
Control Connector	Solder Terminals

### Environmental Specifications

#### Temperature

Operating Range	-25 to +65 deg C
Shock	MIL-STD-202 Method 213, Condition D (500G Non Operating)
Vibration	MIL-STD-202 Method 214, Condition D (100G RMS Non Operating)

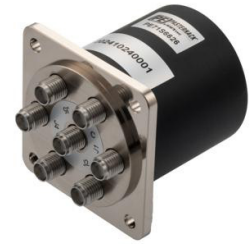
**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

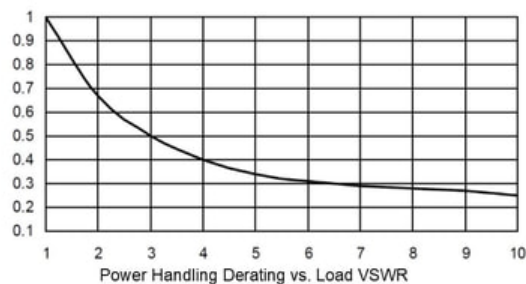
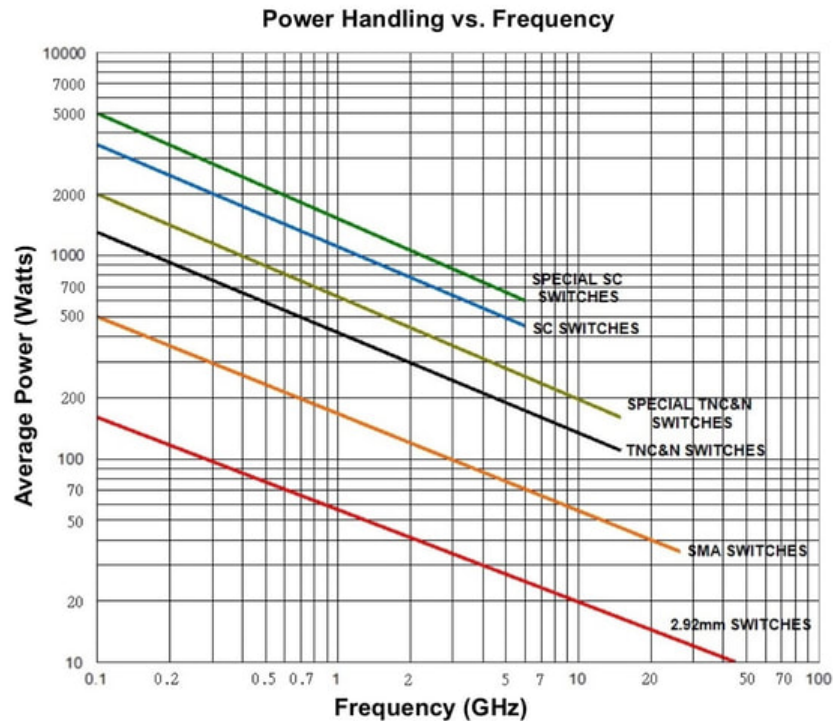
Notes:

SP6T Electromechanical Relay Normally Open Switch,  
DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles

**PE71S6626**



#### Typical Performance Data



Power handling chart and derating curves based on the following conditions:

- Ambient temperature: 40°C or less
- Altitude: Sea level
- Load VSWR: 1.20:1 Maximum
- Relative Humidity: 40-50%
- Cold switching: RF signal off

Note: specifications subject to change without notice

SP6T Electromechanical Relay Normally Open Switch,  
DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles



## PE71S6626

SP6T Electromechanical Relay Normally Open Switch, DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles 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: [SP6T Electromechanical Relay Normally Open Switch, DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles PE71S6626](https://www.pasternack.com/sp6t-electromechanical-relay-normally-open-switch-26.5-ghz-12v-sma-pe71s6626-p.aspx)

URL: <https://www.pasternack.com/sp6t-electromechanical-relay-normally-open-switch-26.5-ghz-12v-sma-pe71s6626-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

SP6T Electromechanical Relay Normally Open Switch, DC to 26.5 GHz, up to 90W, 12V, SMA, 2M Lifecycles

