



SP6T Electromechanical Relay Normally Open Switch
DC to 22 GHz, SMA, 20 Watts, 12V Control

Electromechanical Relay Switches Technical Data Sheet

PE71S6130

Features

- Single Pole Six Throw Relay Switch
- DC to 22 GHz Frequency Range
- 1M Cycle Min Operating Life
- Normally Open Actuator
- Insertion Loss 0.6 dB max
- Isolation 60 dB min
- 20 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications

- Test & Measurement
- Communications System
- Instrumentation

Description

The PE71S6130 is a Single Pole Six Throw Electromechanical Relay Switch that operates from DC to 22 GHz and has a rating of 20 Watts input power (CW) in a Break Before Make condition. The design features a Normally Open Actuator and is rated for 1M Life Cycles for high reliability operation. Insertion loss is specified from 0.3 dB max and Isolation from 75 dB min, with +12 Vdc operating voltage. Performance is guaranteed over -55°C to +85°C and the switch assembly is RoHS compliant. The package interface uses solder terminals and SMA Female connectors.

Electrical Specifications

Switch Type: SP6T, Reflective
 Actuator Type: Normally Open
 Switching Sequence: Break Before Make

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		22	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		310		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	60			dB
Input Power (CW) (at 22 GHz)			20	Watts

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 22 GHz, SMA, 20 Watts, 12V Control PE71S6130](#)



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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	12 to 18	18 to 22	GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1	1.6:1	
Insertion Loss, Max	0.3	0.35	0.4	0.5	0.6	dB
Isolation, Min	75	70	65	60	60	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 0.358 lbs [162.39 g]
Body Material and Plating Aluminum
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 Pin

Environmental Specifications

Temperature

Operating Range -55 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 for current document)

RoHS Compliant

Plotted and Other Data

Notes:

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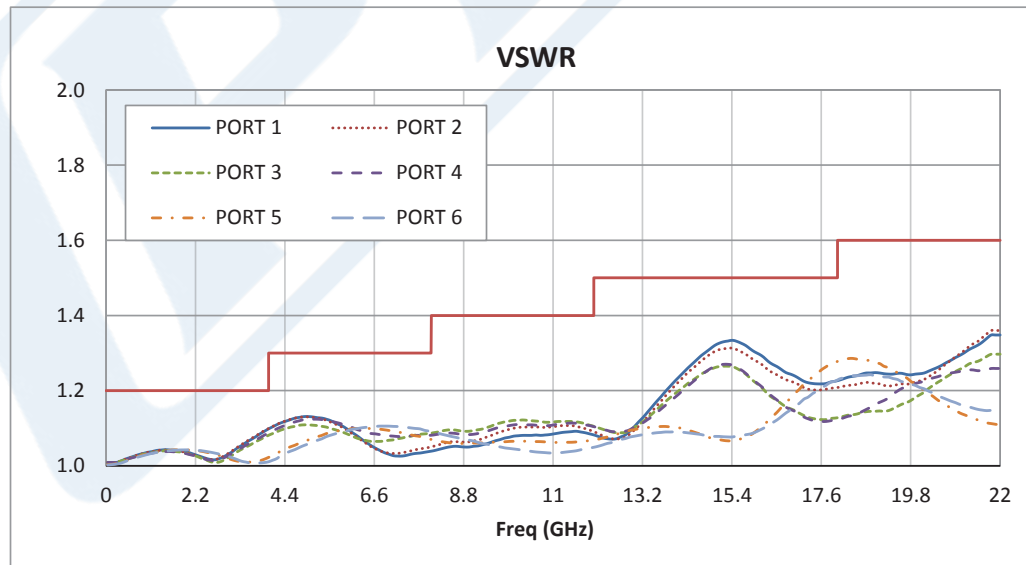
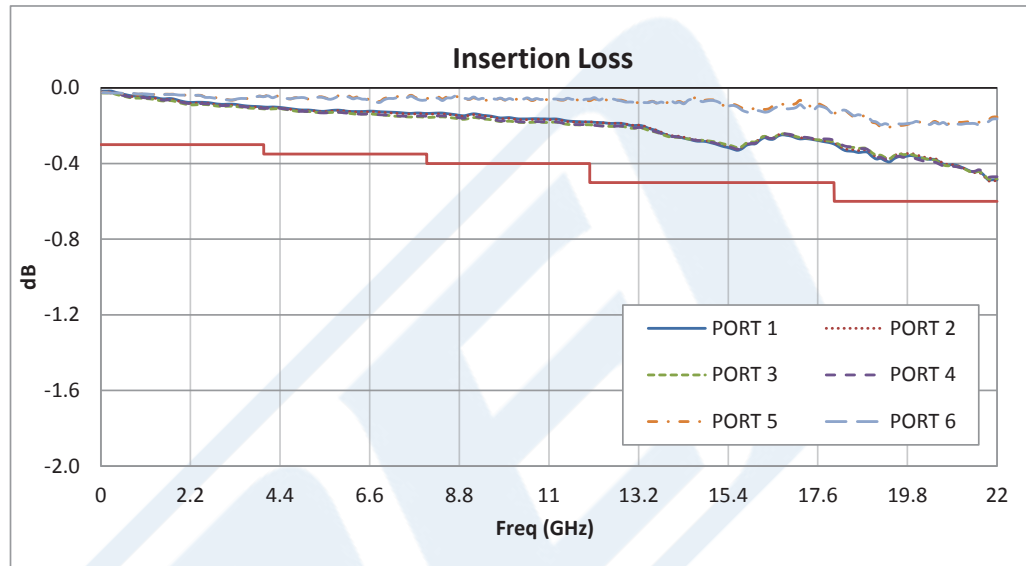


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Typical Performance Data



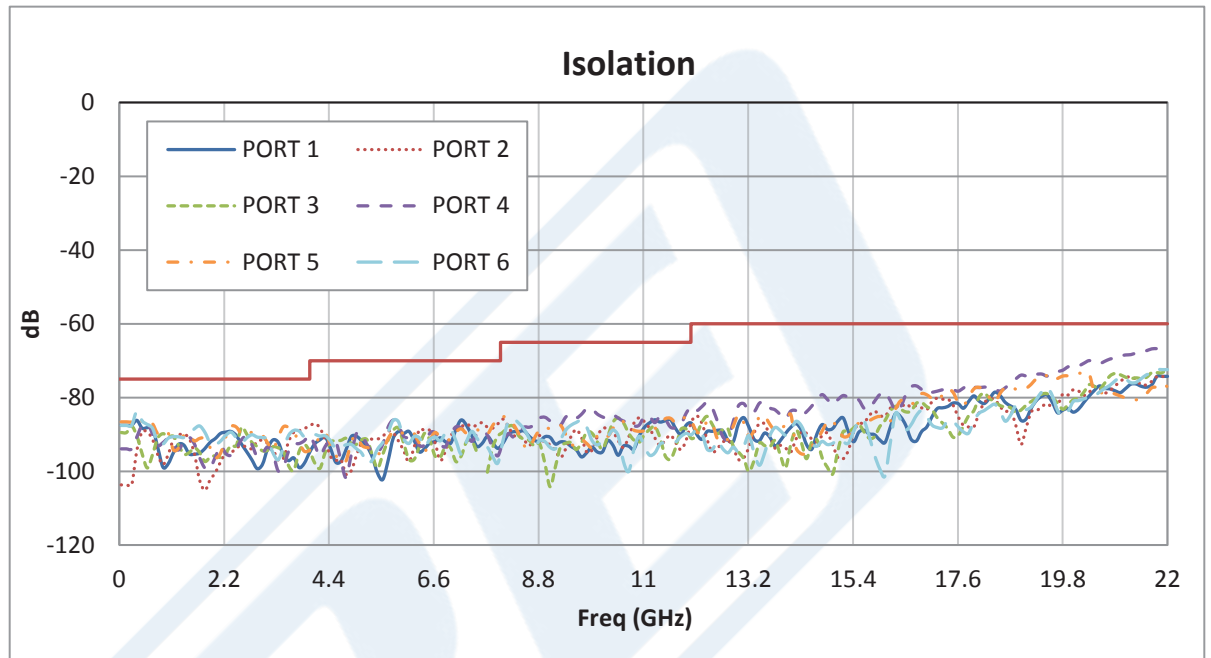
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SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz, SMA, 20 Watts, 12V Control from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability 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: [SP6T Electromechanical Relay Normally Open Switch DC to 22 GHz, SMA, 20 Watts, 12V Control PE71S6130](http://www.pasternack.com/sma-sp6t-electromechanical-relay-switch-22-ghz-normally-open-pe71s6130-p.aspx)

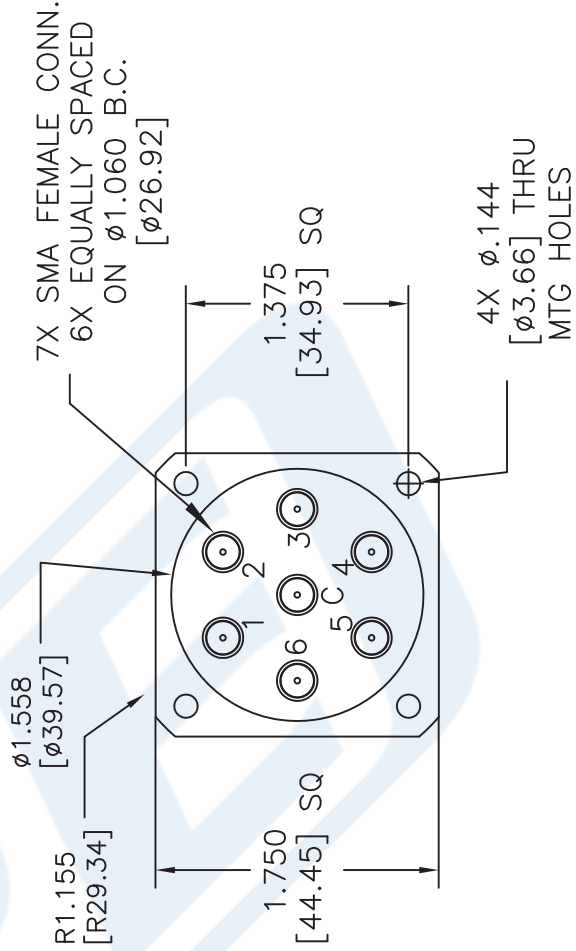
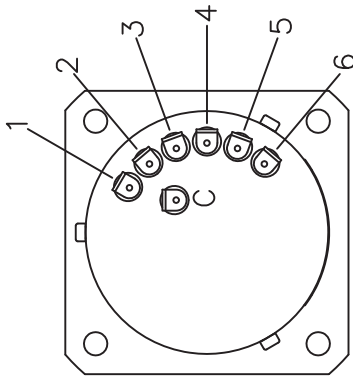
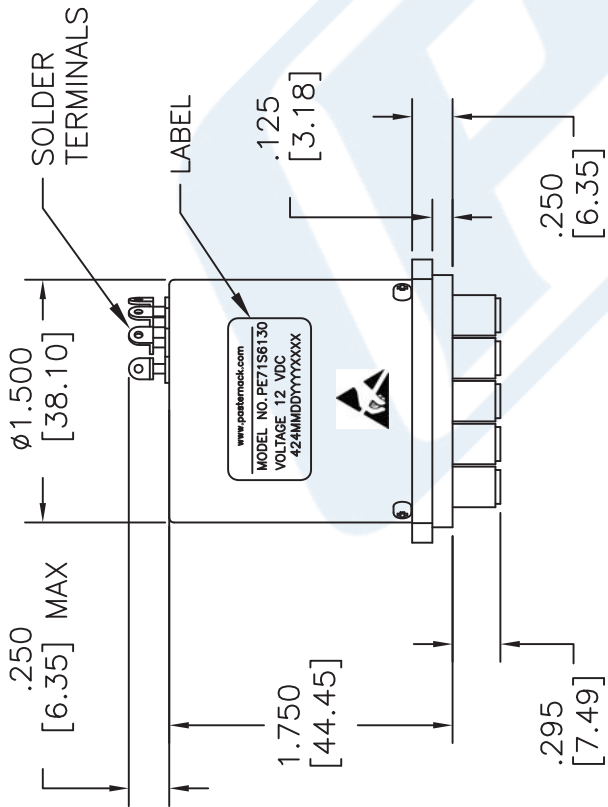
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PE71S6130 CAD Drawing

SP6T Electromechanical Relay Normally Open Switch

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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.

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
PE71S6130

FSCM NO. 53919

CAD FILE 030515

SCALE N/A

SIZE A

2233

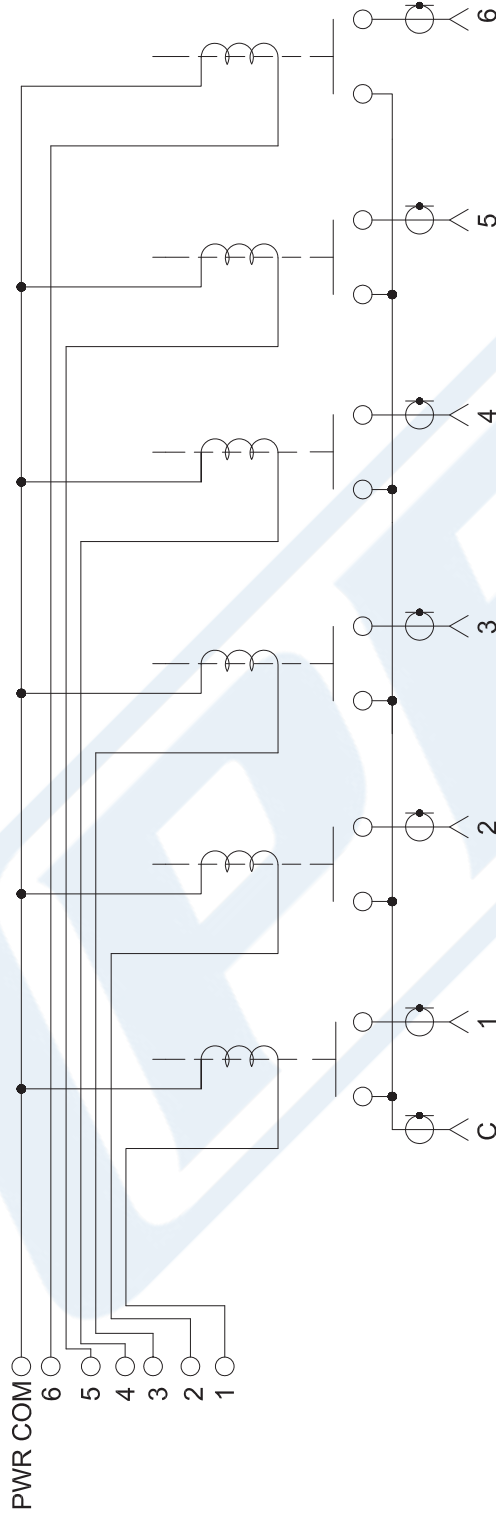
PE PASTERNAK
 THE ENGINEER'S RF SOURCE

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SCHEMATIC NORMALLY OPEN SHOWN IN DE-ENERGIZED POSITION

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