



Transfer Electromechanical Relay Failsafe Switch  
DC to 26.5 GHz, SMA, 20 Watts, 12V Control

Electromechanical Relay Switches Technical Data Sheet

PE71S6110

**Features**

- Transfer Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Min Operating Life
- Failsafe Actuator
- Insertion Loss 0.5 dB max
- Isolation 60 dB min
- 20 Watts Avg Power Max
- Switching Sequence Break Before Make

**Applications**

- Test & Measurement
- Communications System
- Instrumentation

**Description**

The PE71S6110 is a Transfer Electromechanical Relay Switch that operates from DC to 26.5 GHz and has a rating of 20 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 0.2 dB max and Isolation from 80 dB min, with +12 Vdc operating voltage. Performance is guaranteed over -25°C to +65°C and the switch assembly is RoHS compliant. The package interface uses solder terminals and SMA Female connectors.

**Electrical Specifications**

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		26.5	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		375		mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			dB
Input Power (CW) (at 26.5 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: [Transfer Electromechanical Relay Failsafe Switch DC to 26.5 GHz, SMA, 20 Watts, 12V Control PE71S6110](#)



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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 26.5	GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1	1.5:1	
Insertion Loss, Max	0.2	0.3	0.4	0.5	0.5	dB
Isolation, Min	80	75	70	60	60	dB

#### Mechanical Specifications

##### Size

Length	1.75 in [44.45 mm]
Width/Diameter	2.16 in [54.86 mm]
Height	1.363 in [34.62 mm]
Weight	0.348 lbs [157.85 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	35 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	-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](http://www.Pasternack.com) for current document)

RoHS Compliant

#### Plotted and Other Data

Notes:

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 26.5 GHz, SMA, 20 Watts, 12V Control PE71S6110](#)

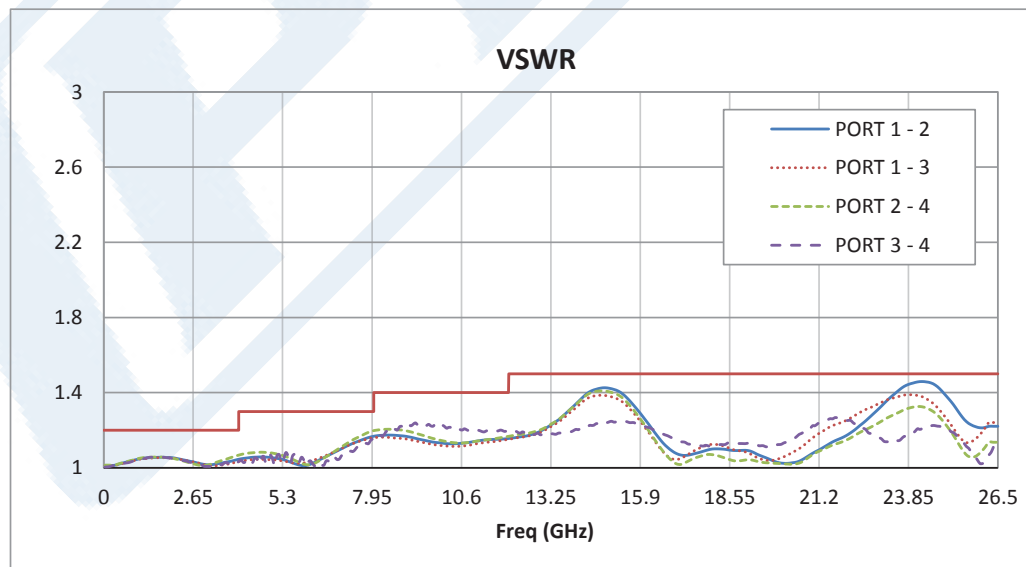
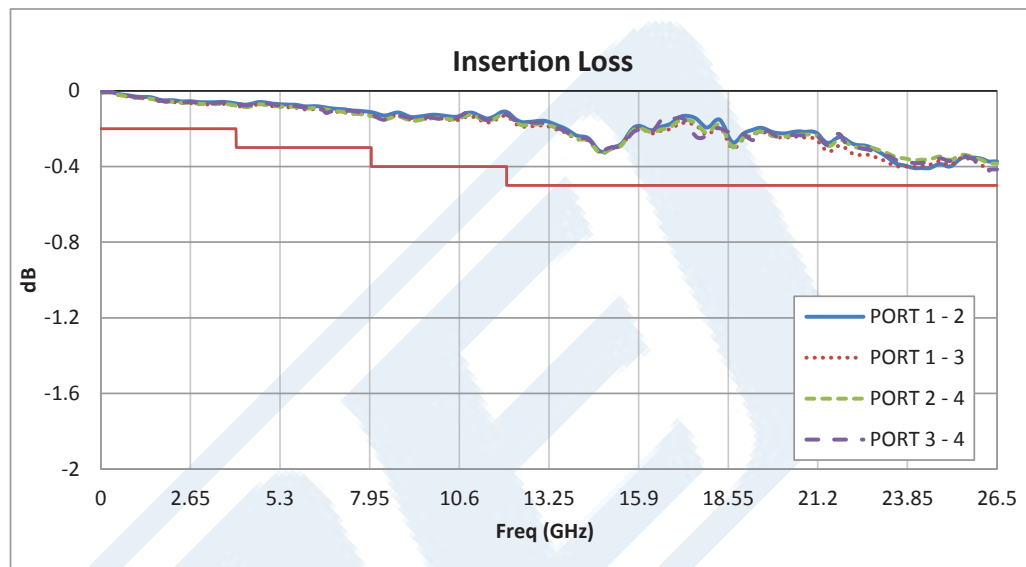


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Typical Performance Data



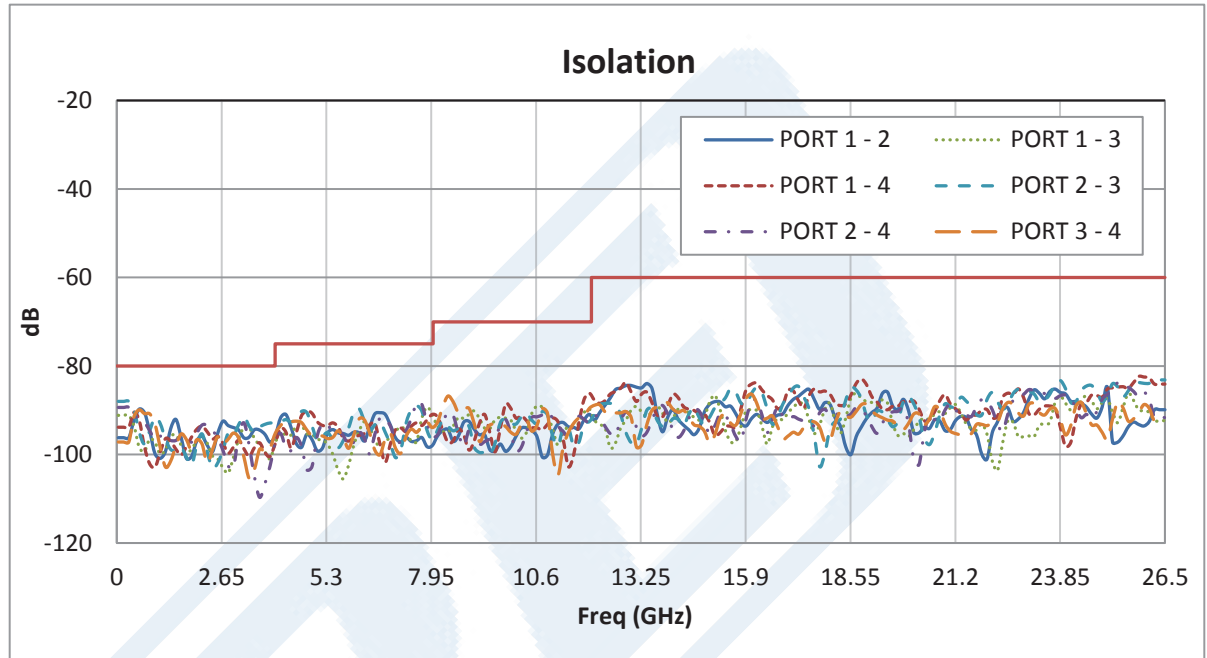
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Transfer Electromechanical Relay Failsafe Switch DC to 26.5 GHz, SMA, 20 Watts, 12V Control from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

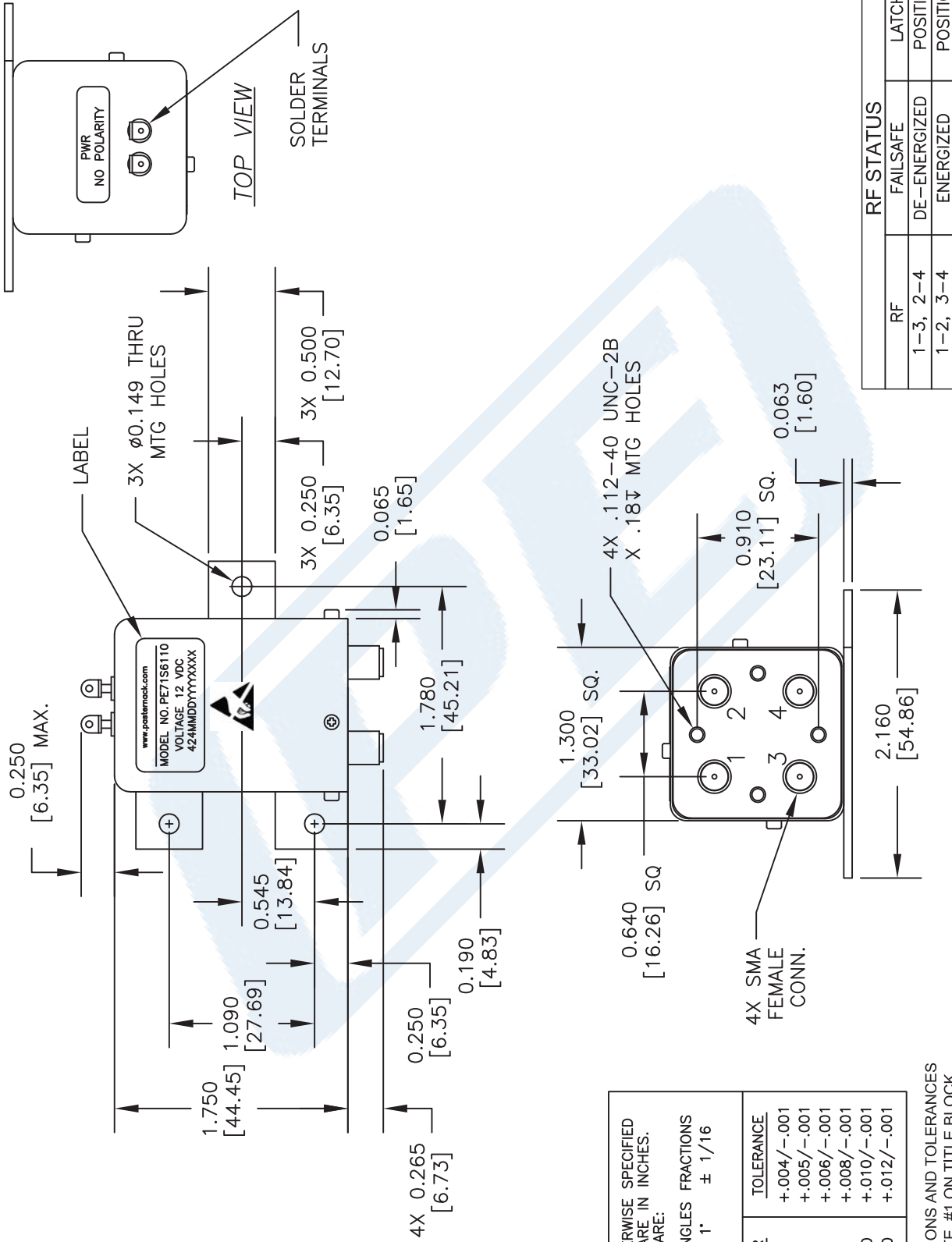
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE71S6110 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC  
to 26.5 GHz, SMA, 20 Watts, 12V Control



RF STATUS		
RF	FAILSAFE	LATCHING
1-3, 2-4	DE-ENERGIZED	POSITION 1
1-2, 3-4	ENERGIZED	POSITION 2

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).

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.

DWG TITLE  
**PE71S6110**

FSCM NO. 53919

CAD FILE 012516

SCALE N/A

SIZE A

2233

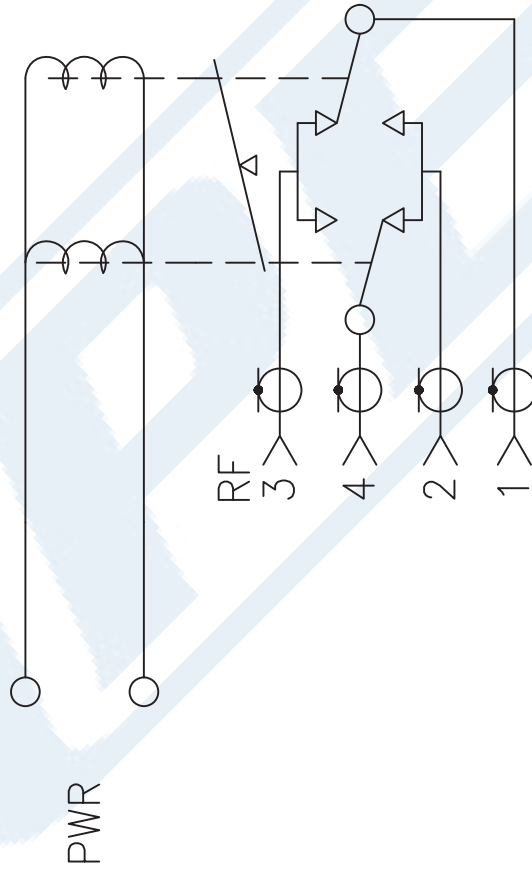
**P****E** **PASTERNAK**  
THE ENGINEER'S RF SOURCE

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

# PE71S6110 CAD Drawing

Transfer Electromechanical Relay Failsafe Switch DC  
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SCHEMATIC LATCHING SHOWN IN POSITION 1

DWG TITLE

**PE71S6110**

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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