

Miniature Surface Mount Coaxial Switches



RLC Electronics' miniature surface mount coaxial switch is a single pole two position type. The switch provides extremely high reliability, long life, and excellent electrical performance characteristics in a miniature package. The power consumption is approximately one half that of the miniature connectorized switches. The switch is available with a choice of four different operating frequencies, three coil voltages, and two different pin configurations.

Specifications

SR-2-min-min⁻¹⁻²⁻³

Switch Type	Single pole two position			
Frequency (GHz)	DC-2.0	2.0-5.0	5.0-12.4	12.4-18
Insertion Loss (Max dB)	0.2	0.3	0.4	0.7
VSWR (Max)	1.3	1.4	1.5	1.7
Isolation (dB Min)	70	60	50	40

Power Rating, RF Cold See page 79

Switching:

Impedance: 50 ohms

Operating Power: 5vdc at 310mA
25 deg C 12vdc at 130mA
(ma nominal) 28vdc at 75mA

Connectors: RF and power: .018
DIA. Pins

Life: 1,000,000 operations

Switching Time: 15 milliseconds
max.

Weight: 0.6 oz.

Environmental MIL- DTL-3928

Conditions:

Operating Mode: Failsafe or Pulse
latching

Switching Sequence: Break before make

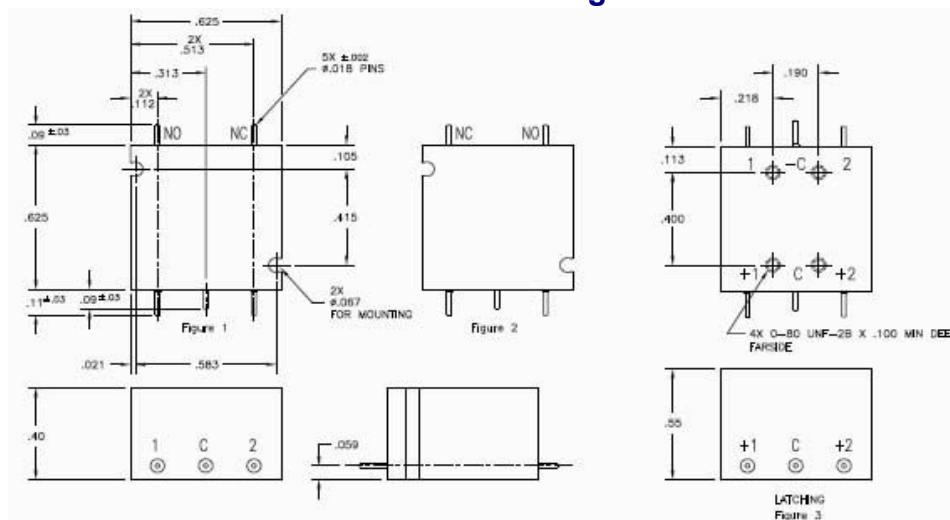
To designate the Switch desired use:

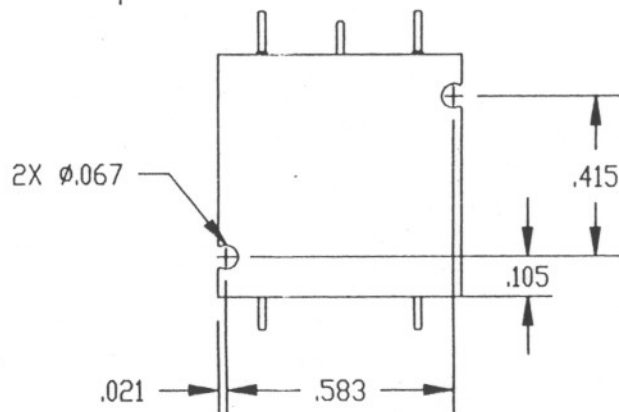
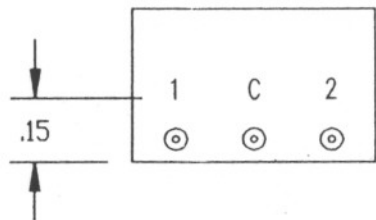
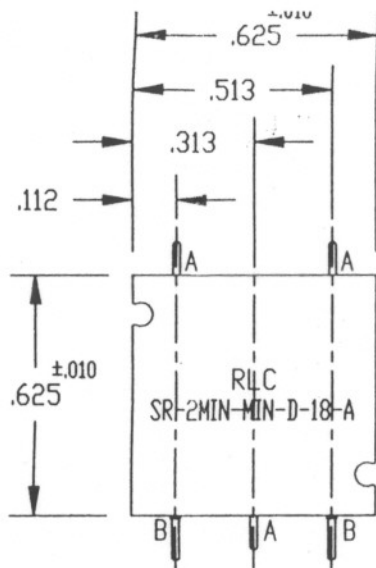
- (1) 'H' for 12-15 volts coil 'D' for 24-28
volts coil 'E' for 5 volt coil
- (3) 'L' for Pulse latching

- (2) '2' for DC-2GHz '5' for DC-5 GHz '12'
for DC-12.4 GHz '18' for DC-18 GHz
- (4) 'A' for Figure 1 (pin configuration) "B"
for Figure 2 (pin configuration)

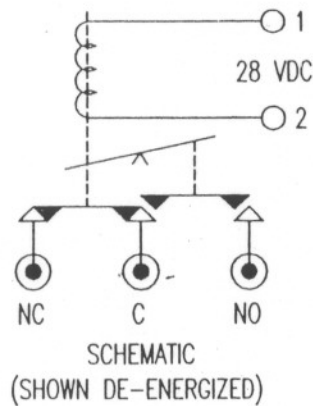
Example: SR-2min-min-D-2-A is a SPDT, 24-28vdc, DC-2 GHz, failsafe switch. (per Figure 1)
SR-2min-min-D-2-L is a SPDT, 24-28vdc, DC-2 GHz Pulse latching switch. (per Figure 3)

Outline Drawing

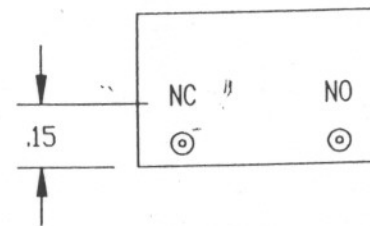
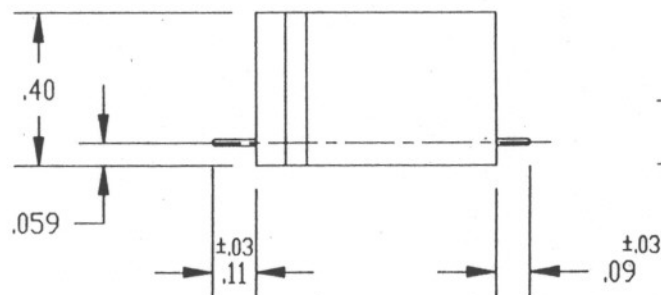




DO NOT SCALE DRAWING



REV	DESCRIPTION	DT	BY
A	40492		



NOTES:

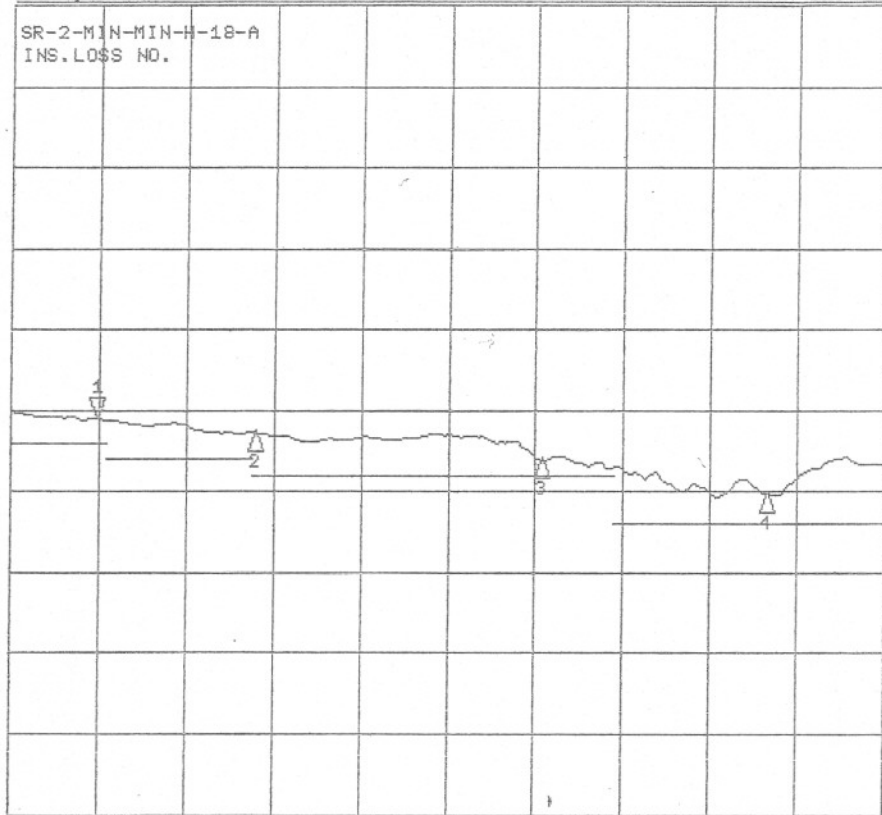
- 1) A PINS (3) FOR THE RF
- 2) B PINS (2) FOR THE COIL
- 3) PINS DIAMETER .018

MATERIAL	SR-2MIN-MIN-D-18-A SWITCH OUTLINE		
FINISH	TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS ± 1/64 ANGLES ± 1/2 XX ± .020 XXX ± .005	B/M	5065
		SOF	
		SCALE 2:1	
		DWN	PF 2-26-01
		APPD	ca 3/08/01
RLC ELECTRONICS		A	40492
83 RADIO CIRCLE, MT. KISCO, NEW YORK 10549			

CH2 S21 L06 .5 dB/REF 0 dB 1:-.05200 dB 1.762 927 984 GHz

SR-2-MIN-MIN-H-18-A
INS.LOSS NO.

PRM
Smo
Cor



CH2 Markers

2:-1.3100 dB
5.00000 GHz

3:-3.0000 dB
10.9075 GHz

4:-5.0600 dB
15.5458 GHz

START .050 000 000 GHz

STOP 18.010 000 000 GHz

CH2 S21 LOG .5 dB/REF 0 dB 1:-.05200 dB 1.762 927 984 GHz

SR-2-MIN-MIN-H-10-A
INS.LOSS NC.

CH2 Markers

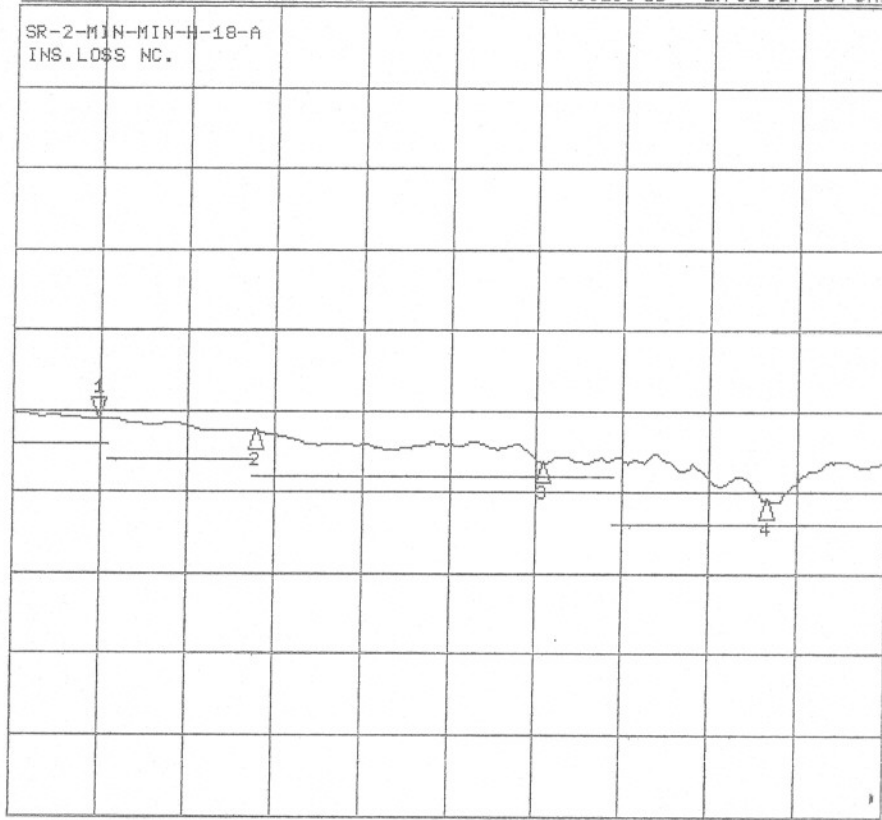
2:-.11800 dB
5.00000 GHz

3:-.31800 dB
10.9075 GHz

4:-.54000 dB
15.5458 GHz

PRm
Smo
Cor

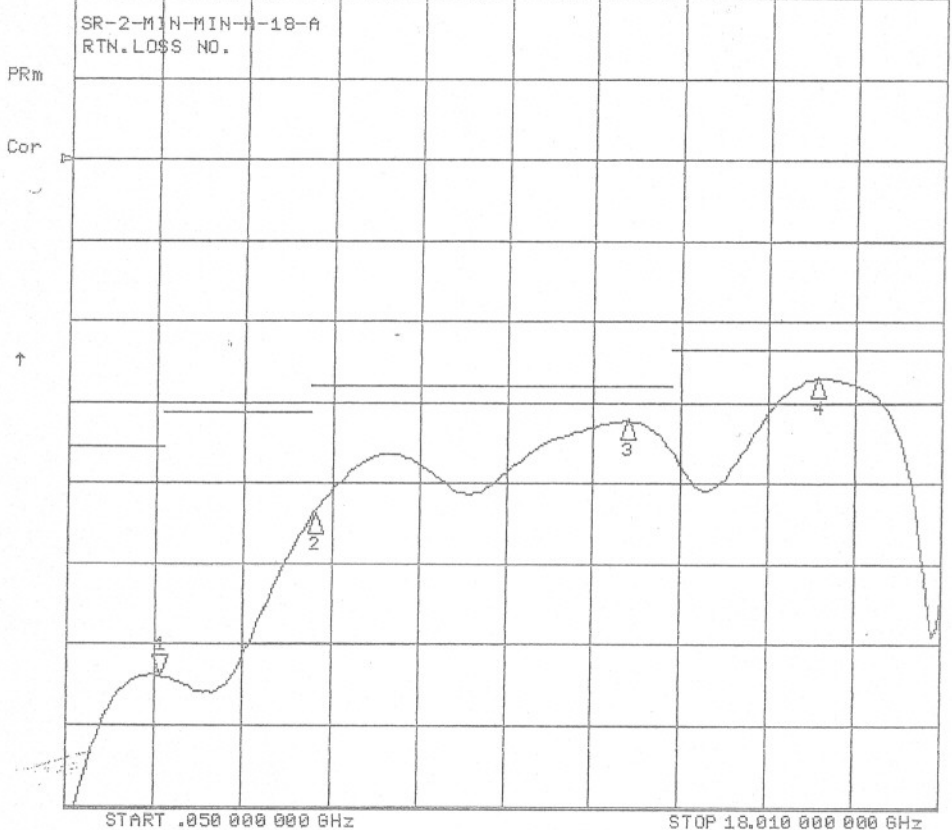
↑



START .050 000 000 GHz

STOP 18.010 000 000 GHz

CH1 S11 LOG 5 dB/REF 0 dB 1:-31.950 dB ~1.914 164 162 GHz



CH1 Markers

2:-21.921 dB
5.04998 GHz

3:-16.106 dB
11.4850 GHz

4:-13.551 dB
15.4182 GHz

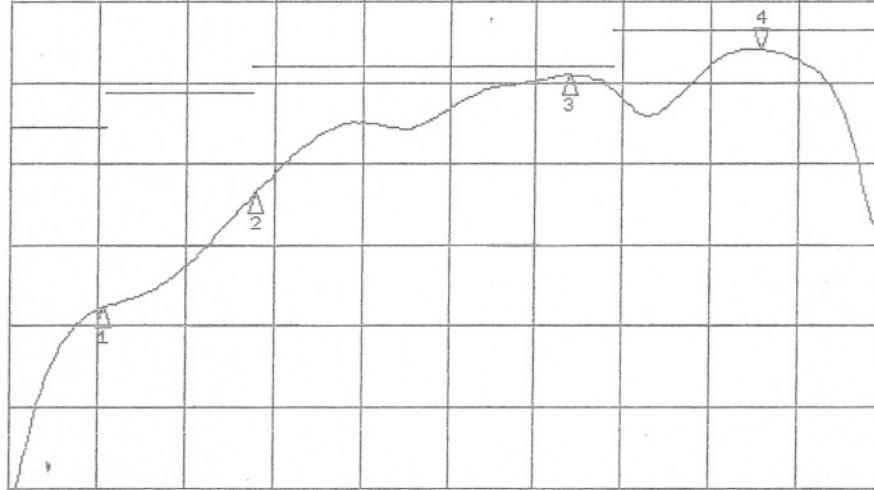
CH1 S11 LOG 5 dB/REF 0 dB 41-12.892 dB 15.418 288 802.6Hz

SR-2-MIN-MIN-H-18-A
RTN.LOSS NC.

PRm

Cor

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START .050 000 000 GHz

STOP 18.010 000 000 GHz

CH1 Markers

1:-28.940 dB
1.91416 GHz

2:-21.827 dB
5.02842 GHz

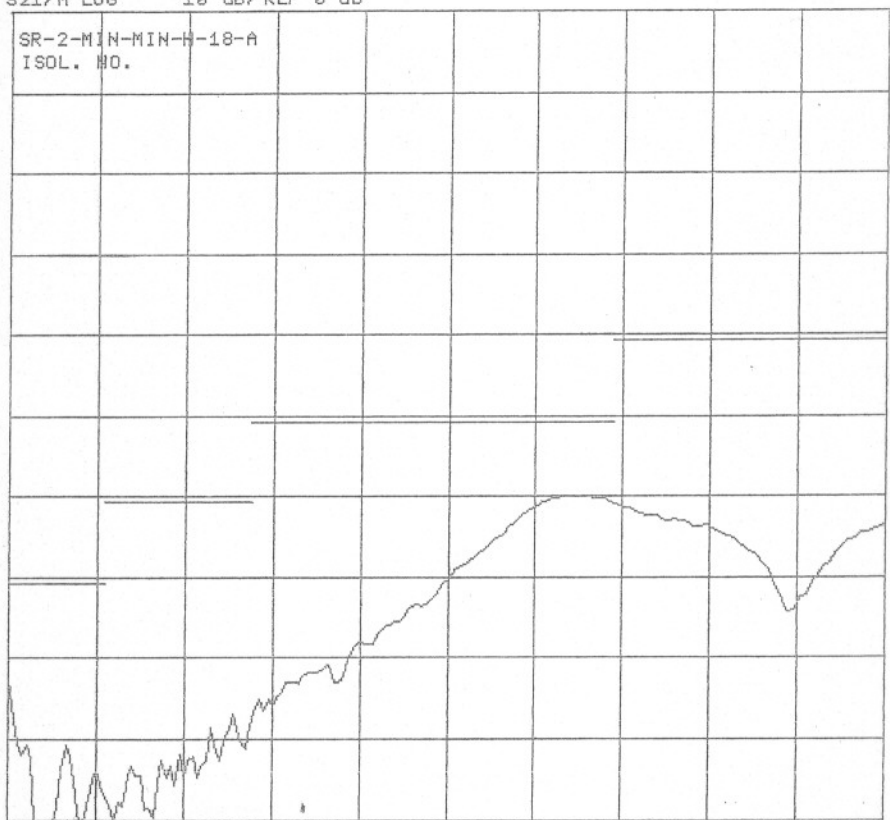
3:-14.498 dB
11.4850 GHz

CH2 S21/M LOG 10 dB/REF 0 dB

SR-2-MIN-MIN-H-10-A
ISOL. #10.

PRm
Smo
Cor

↑



CH2 S21/M LOG 10 dB/REF 0 dB

SR-2-MIN-MIN-H-18-A
ISOL. MC.

PRm
Smo
Cor

↑

START .050 000 000 GHz

STOP 18.010 000 000 GHz

