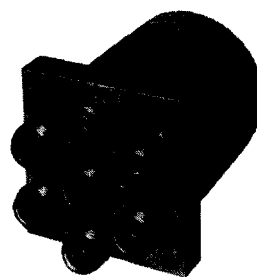


Standard Multi-Position Coaxial Switches



RLC Electronics' Standard Multi-Position Coaxial Switch line provides extremely high reliability, long life and outstanding electrical performance by utilizing high density packaging. The Multi-Position electrical characteristics features extremely low insertion loss and VSWR over the entire DC-12.4

GHz range while maintaining high isolation. The switch is available in the following configurations-manual or remote, N, TNC, BNC, or SMA type connectors, 12 Vdc, 28 Vdc or 115 Vac operations, with or without indicator terminals, failsafe or latching cutthroat.

Specifications

S^{1,2,3,4,5,6,7}

RF POSITIONS	3	4	5	6
Switch type:	SP-3T	SP-4T	SP-5T	SP-6T
Frequency Range: (GHz)	DC-12.4	DC-12.4	DC-12.4	DC-12.4
Insertion Loss: (dB) (max)				
DC-7 GHz	0.30	0.30	0.30	0.30
7-12.4 GHz	0.60	0.60	0.60	0.60
VSWR: (max)				
DC-7 GHz	1.30	1.30	1.30	1.30
7-12.4 GHz	1.60	1.60	1.60	1.60
Isolation: (dB) (min)	55	55	55	55

Power Rating, RF, Cold Switching: See page 2.

Impedance: 50 ohms

Operating Power 25°C:

(Failsafe): 12 Vdc at 270 ma. nom.,

28 Vdc at 190 ma nom.

115 Vac at 50 ma nom.

(Latching): 28 Vdc at 3.5 Amps nom.

115 Vac at 225 ma. nom.

Cutthroat circuitry (standard),
recovery time 100 ms nom.

Connectors, RF: N, SMA, TNC, BNC* Female.

Connectors, Power: Feed through solder lugs.

Life: 1,000,000 operations.

Switching Time: 20, ms max. Failsafe,
125 ms latching.

Weight: 20 oz.

Environmental Conditions: MIL-S-3928

Operating Mode: Manual, failsafe or latching.

Switching Sequence: Break before make.

*BNC not recommended for use above 1 GHz.

To designate the switch desired use:

(1) "M" for manual or "R" for Remote.

(2) "3", "4", "5" or "6" throw operation.

(3) "N", "T" for TNC, "B" for BNC or "R" for SMA
type connectors.

(4) "A" for 115 Vac, "H" for 12 Vdc., or
"D" for 28 Vdc power.

(5) "I" for indicators if desired.

(6) "L" for latching cut throat if desired.

(7) "TL" for TTL Driver if desired.

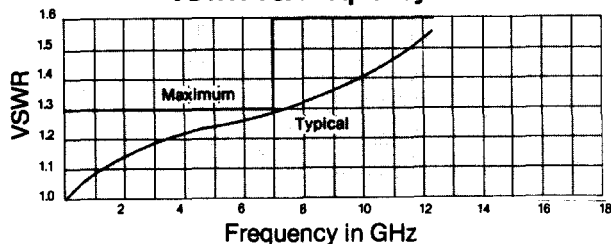
Example: SR-6-N-D-I-L is a remote, 6 position, N connector, 28 Vdc, with indicators, latching cut throat switch.

Specials requiring closer tolerances, different frequency ranges, special connectors, different materials, finishes, etc., can be furnished upon request. Specifications subject to change without notice.

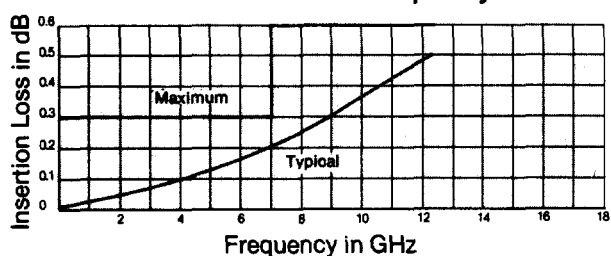


Typical Operating Curves

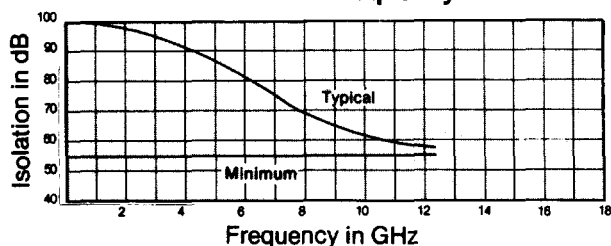
VSWR Vs. Frequency



Insertion Loss Vs. Frequency

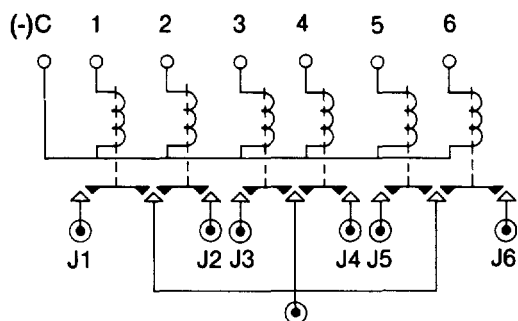


Isolation Vs. Frequency



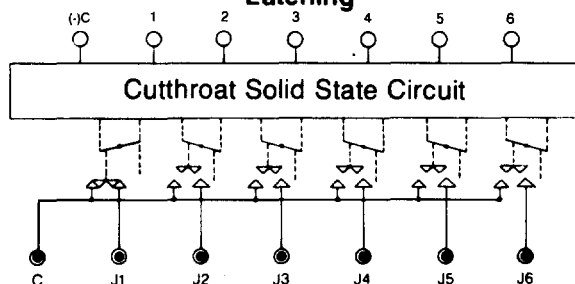
Schematics

Failsafe



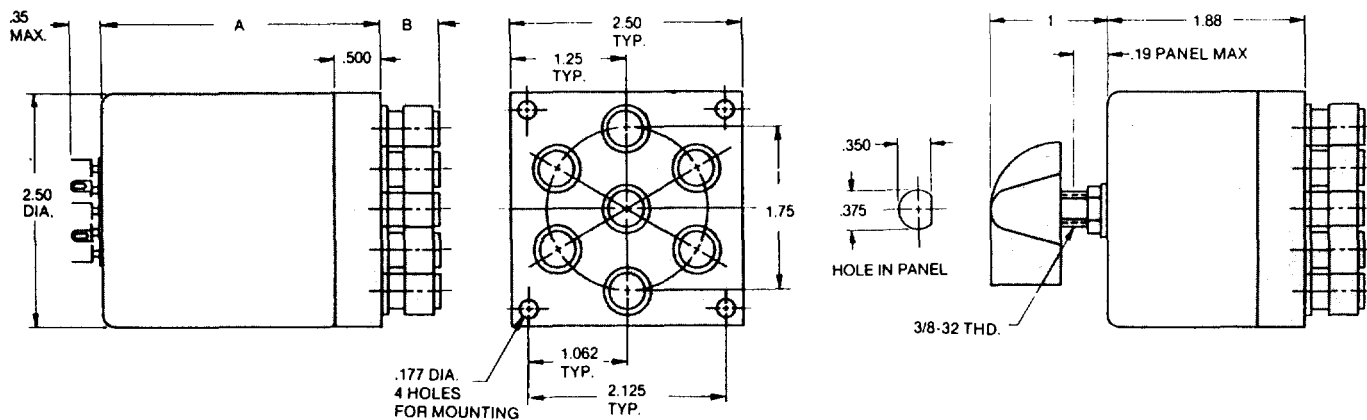
3 TO 6 POSITIONS
ALL POSITIONS NORMALLY OPEN

Latching



3 TO 6 POSITIONS
POSITION 1 SHOWN CLOSED

Outlines



MODEL	A	
	FAILSAFE	LATCHING
SR-**-D	3.06	3.72
SR-**-D-I	3.72	3.72
SR-**-A	3.72	4.34
SR-**-A-I	3.72	4.34

CONN	B
N	.70
HN	.70
SC	.70
TNC	1.00

Tolerances unless otherwise specified are: .xx, $\pm .02$; .xxx, $\pm .005$.

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