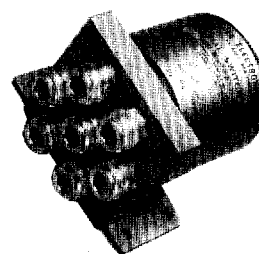


High Power Multi-Position Coaxial Switches



RLC Electronics' High Power 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-6 GHz range while

maintaining high isolation. The switch is available in the following configurations-manual or remote, N, TNC, HN or SC type connectors, 12 Vdc, 28 Vdc or 115 Vac operation, with or without indicator terminals, failsafe or latching cutthroat.

Specifications

S1.2.P.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-6	DC-6	DC-6	DC-6
Insertion Loss: (dB) (max)				
DC-1 GHz	.15	.15	.15	.15
1-3 GHz	.35	.35	.35	.35
3-6 GHz	.50	.50	.50	.50
VSWR: (max)				
DC-1 GHz	1.15	1.15	1.15	1.15
1-3 GHz	1.35	1.35	1.35	1.35
3-6 GHz	1.50	1.50	1.50	1.50
Isolation: (dB) (min)				
DC-1 GHz	80	80	80	80
1-3 GHz	70	70	70	70
3-6 GHz	60	60	60	60

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, HN, SC, TNC Female

Connectors, Power: Feed through solder lugs.

(HN not recommended for use above 4 GHz)

Life: 1,000,000 operations.

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

Environmental Conditions: MIL-S-3928

Operating Mode: Manual, failsafe or latching.

Switching Sequence: Break before make.

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, "H" for HN or "S" for SC type connectors.

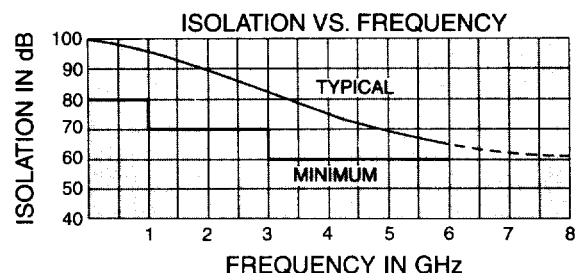
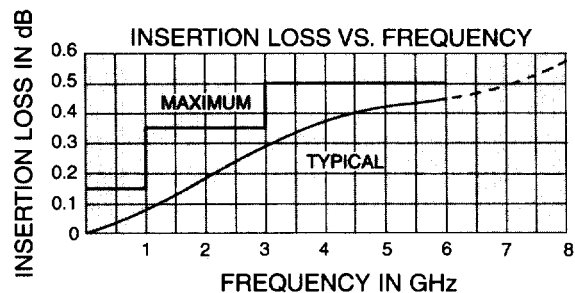
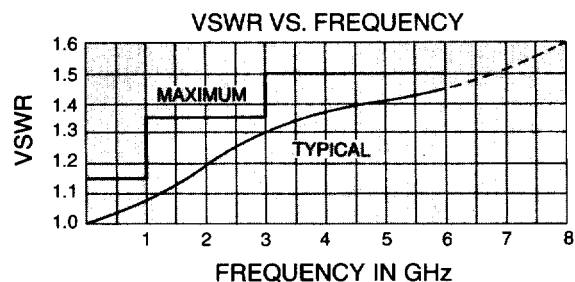
- (4) "A" for 115 Vac, "H" for 12 Vdc., or "D" for 28 Vdc power.
- (5) "I" for indicators if desired.
- (6) "L" for latching cut throat if desired.
- (7) "TL" for TTL Driver if desired.

Example: SR-6-P-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.

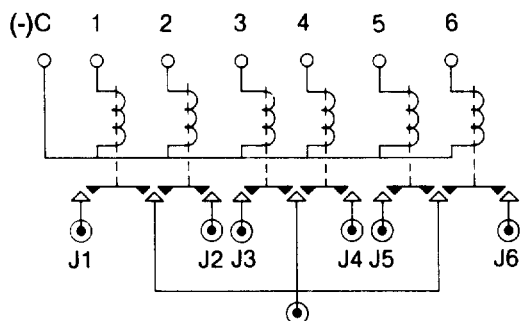


Typical Operating Curves



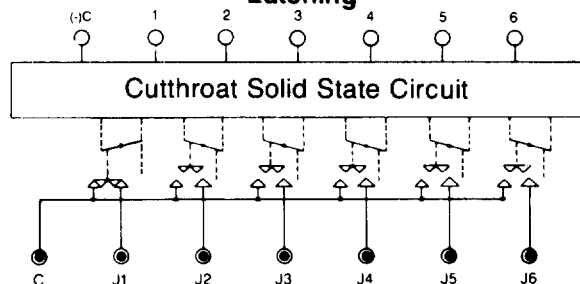
Schematics

Failsafe



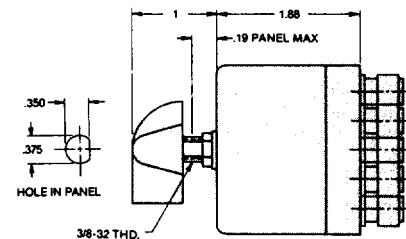
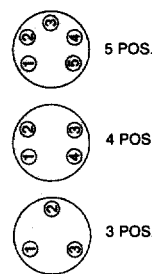
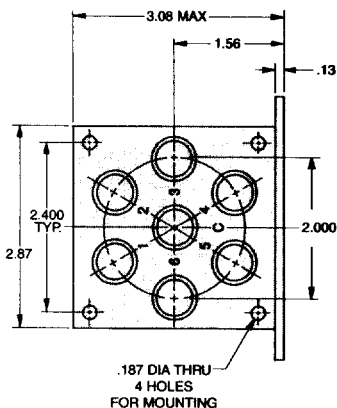
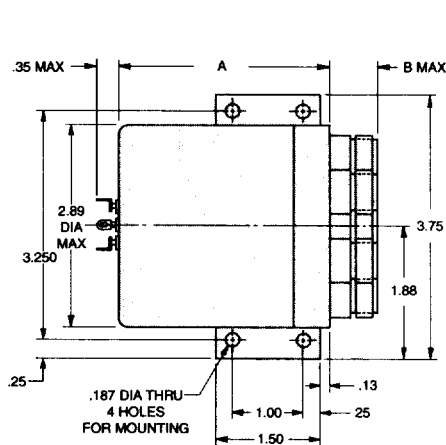
3 TO 6 POSITIONS
ALL POSITIONS NORMALLY OPEN

Latching



3 TO 6 POSITIONS
POSITION 1 SHOWN CLOSED

Outlines



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