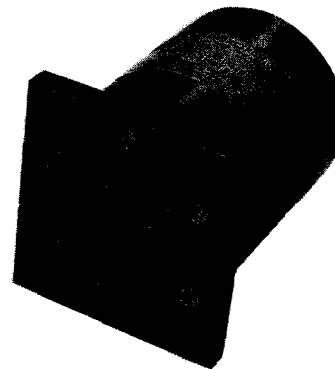


# Terminated Multi-Position Coaxial Switches (3 to 6 Position)



RLC Electronics' Terminated Multi-Position Coaxial Switch line provides proven reliability, long life and outstanding electrical performance.

These switches offer electrical characteristics featuring extremely low insertion loss and VSWR over the entire DC-18 GHz

range while maintaining high isolation. These switches are available in remote, 12 Vdc, 28 Vdc or 115 Vac operation, with or without indicator terminals, failsafe or latching cutthroat. Standard RF power rating is 2 watts cw limited by the termination.

## Specifications

STR<sup>1,2,3,4,5,6</sup>

RF POSITIONS	3	4	5	6	ALL*
Switch type:	SP-3T	SP-4T	SP-5T	SP-6T	OPT 26
Frequency Range: (GHz)	DC-18	DC-18	DC-18	DC-18	18-26.5
Insertion Loss: (dB) (max)					
DC-4	0.20	0.20	0.20	0.20	1.00
4-12.4 GHz	0.30	0.30	0.30	0.30	
12.4-18 GHz	0.50	0.50	0.50	0.50	
VSWR (max)					
DC-4	1.25	1.25	1.25	1.25	1.80
4-12.4 GHz	1.40	1.40	1.40	1.40	
12.4-18 GHz	1.50	1.50	1.50	1.50	
Isolation: (dB) (min)	60	60	60	60	40

**Power Rating, RF:** 2 watts average.

**Impedance:** 50 ohms.

**Operating Power 25°C:**

(Failsafe): 12 Vdc at 600 ma nom.

28 Vdc at 260 ma nom.

115 Vac at 40 ma nom.,

(Latching): 12 Vdc at 480 ma nom.

28 Vdc at 240ma nom. 115 Vac at 225 ma nom.

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

**Connectors, RF:** SMA Female.

**Life:** 1,000,000 operations.

**Switching Time:** 25 milliseconds max. failsafe,  
125 ms latching

**Weight:** 20 oz.

**Enviromental Conditions:** MIL-S-3928

**Operating Mode:** Failsafe or latching.

**Switching Sequence:** Break before make.

To designate the switch desired use:

- (1) "3", "4", "5" or "6" throw operation.
- (2) "A" for 115 Vac, "H" for 12 Vdc., or "D" for 28 Vdc.
- (3) "I" for indicators if desired.

- (4) "L" for latching cutthroat if desired
- (5) "TL" for TTL Driver if desired.
- (6) "26" for 26.5 GHz options.

**Example:** STR-3-D is a SP-3T, 28 Vdc, without indicators, failsafe 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.

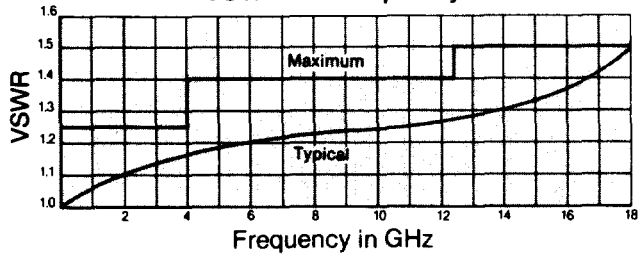


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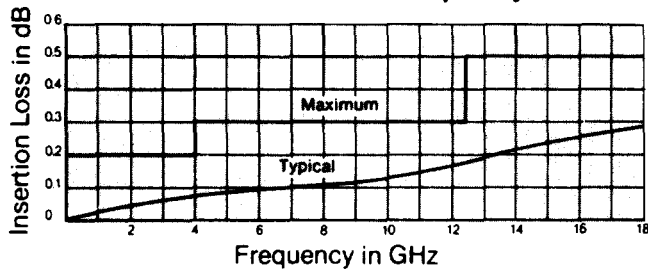
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# Typical Operating Curves

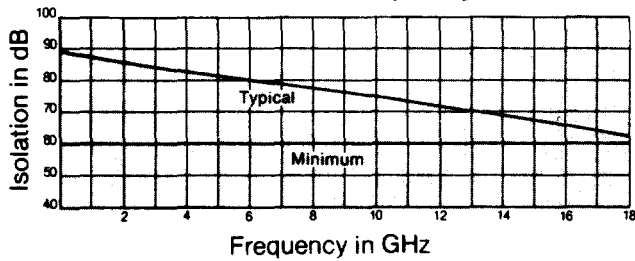
VSWR Vs. Frequency



Insertion Loss Vs. Frequency

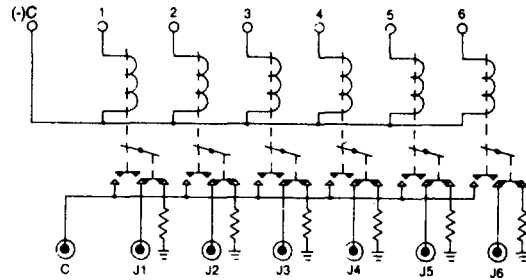


Isolation Vs. Frequency



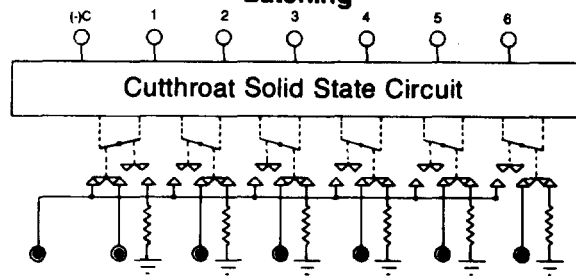
# Schematics

Failsafe



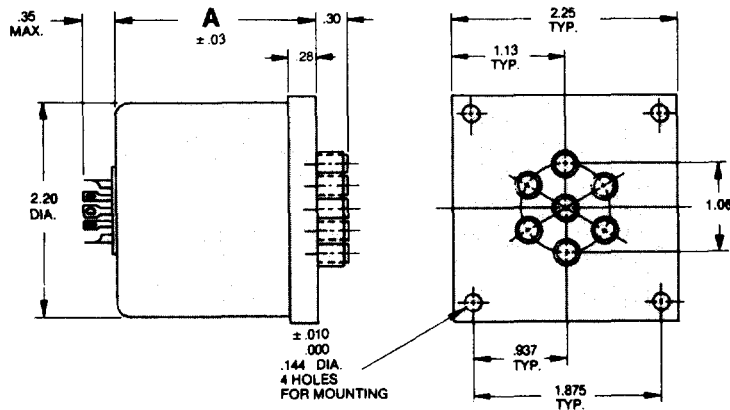
3 TO 6 POSITIONS  
ALL POSITIONS NORMALLY OPEN

Latching



3 TO 6 POSITIONS  
POSITION 1 SHOWN CLOSED

# Outlines



3 TO 6 POSITIONS

MODEL NO.	A
STR-★-D	2.79
STR-★-D-I	3.40
STR-★-D-L	4.03
STR-★-D-I-L	4.03
STR-★-D-TL	3.43
STR-★-D-I-TL	3.75
STR-★-D-I-L-TL	4.25
STR-★-H same as STR-★-D	

Tolerances unless otherwise specified are: .xx, ±.02; .xxx, ±.005.

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