

Terminated Multi-Position Coaxial Switches (7 to 12 Position)



RLC Electronics' Terminated 7-12 Multi-Position Coaxial Switch line provides proven reliability, long life and outstanding electrical performance. and features extremely low insertion loss and VSWR over the entire DC-18 GHz range, while maintaining high isolation. Standard RF power rating is 2 watts cw limited by the termination.

Specifications

STR⁻¹⁻²⁻³⁻⁴⁻⁵

RF Positions	7	8	9	10	11	12
Switch Type:	SP-7T	SP-8T	SP-9T	SP-10T	SP-11T	SP-12T
Frequency Range:(GHz)	DC-18	DC-18	DC-18	DC-18	DC-18	DC-18
Insertion Loss (Max dB)						
DC-6 GHz	0.30	0.30	0.30	0.30	0.30	0.30
6.0-12.0 GHz	0.50	0.50	0.50	0.50	0.50	0.50
12.0-16.0 GHz	0.70	0.70	0.70	0.70	0.70	0.70
16.0-18.0 GHz	1.00	1.00	1.00	1.00	1.00	1.00
VSWR (Max)						
DC-6 GHz	1.40	1.40	1.40	1.40	1.40	1.40
6.0-12.0 GHz	1.50	1.50	1.50	1.50	1.50	1.50
12.0-16.0 GHz	1.70	1.70	1.70	1.70	1.70	1.70
16.0-18.0 GHz	1.80	1.80	1.80	1.80	1.80	1.80
Isolation (dB) (Min)	60	60	60	60	50	50

Power Rating, RF Cold Switching: 2 watts average

Impedance: 50 Ohms

Operating Power 25C:

(Failsafe):

7 to 10 positions
12 Vdc at 325 mA
(nominal)
28Vdc at 190 mA
(nominal)

11 and 12 positions
5Vdc at 600mA (nominal)
12Vdc at 250mA (nominal)
28Vdc at 140mA (nominal)

(Latching): "N/A" for 11-12 position. 12Vdc at 480mA (nominal), 28Vdc at 280 mA (nominal), Cutthroat circuitry (standard), recovery time 100ms (nominal)

Connectors, RF: SMA Female

Life: 1,000,000 operations.

Switching Time: 25 mS Max. (failsafe) 125 ms (latching)

Weight: 30 oz. 17 oz for 11-12 position

Environmental Conditions: MIL-DTL-3928

Operating Mode: Failsafe/Latching/Manual (11-12 position only)

Switching Sequence: Break before make.

To designate the switch desired use:

- 1: "7", "8", "9", "10", "11", "12" throw operation
- 2: "A" for 115 Vac, "D" for 28 Vdc or "H" for 12 Vdc
- 3: "I" for indicators.
- 4: "L" for Latching cutthroat. "N/A" for 11-12 position

- 5: "TL" for TTL Driver

ARCN for arc suppression diodes, common negative

ARCP for arc suppression diodes, common positive

Note: "T" automatically comes with suppression diodes.

Example: STR-10-D is a SP-10T, 28 Vdc, Terminated, failsafe switch

Outline Drawing

