Miniature Coaxial Switches



This RLC Electronics' Miniature Coaxial Switch is a single pole, two position type. The switch provides extremely high reliability, long life and excellent electrical performance characteristics over the frequency range of DC-65 GHz.

The miniature package utilizes high density packaging techniques, hence the overall volume of the switch is less than 3/4 cubic inch.

Specifications

S1-2 MIN²⁻³⁻⁴⁻⁵⁻⁶⁻⁷⁻⁸

Switch Type	SINGLE POLE TWO POSITION										
Frequency Range	DC-18.0 GHz			26.5 GHz Opt	40.0GHz Option				50.0GHz Opt.	65.0GHz Opt.	
Frequency (GHz)	DC-4.0	4.0-12.4	12.4-18.0	18-26.5	DC-6	6-12	12-18	18-26.5	26.5-40	40-50	50-65
Insertion Loss (Max dB)	0.1	0.2	0.3	0.5	0.2	0.4	0.5	0.7	0.9	1.1	1.1
VSWR (Max)	1.2:1	1.3:1	1.5:1	1.5:1	1.3:1	1.4:1	1.5:1	1.7:1	1.9:1	1.9	1.9
Isolation (Min)	80	70	60	60	70	60	60	55	50	50	50

Power Rating, RF Cold Switching: See page 5.

Impedance: 50 Ohms
Operating Power 25°C:

(Failsafe): 12Vdc at 250 ma nom.

28Vdc at 140 ma nom. 115 Vac at 50 ma nom. (Latching): 12 Vdc at 120 ma nom. 28 Vdc at 60 ma nom. 115 Vac at 43 ma nom. Current applied

10 ms min. cutthroat circuitry(standard),

recovery time 100 ms nom.

Connectors, RF: SMA Female (40 GHz - 2.92 mm)

(50 GHz - 2.4 mm) (65 GHz - 1.85 mm) **Connectors, Power:** Feed through solder lugs.

Life: 1,000,000 operations. **Switching Time:** 15 mS Max.

Weight: 2 oz.

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, "R" for Remote.
- (2) "Min" for outboard mountings or "Minin" for inboard mountings.40 GHz is inboard only.
- (3) "A" for 115 Vac, "D" for 28 Vdc or "H" for 12 Vdc.
- (4) "I" for indicators if desired.
- (5) "L" for latching cutthroat if desired.

- (6) "TL" for TTL Driver if desired
- (7) "26" for 26.5 GHz option., "40" for 40 GHz option, "50" for 50 GHz option, "65" for 65 GHz option
- (8) "Arc" for Arc Suppression diodes (N/A with TTL and Latching)

Example: SR-2 MIN-D is a remote, outboard mounting, 28 Vdc; Failsafe switch, for DC to 18 GHz use.

Outline Drawing



