## 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

$S^{1}-2$ MIN $^{2-3-4-5-6-7-8}$

| Switch Type | SINGLE POLE TWO POSITION |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | DC-18.0 GHz |  |  | 26.5 GHz Opt | 40.0 GHz 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 $25^{\circ} \mathrm{C}$ :
(Failsafe): 12 Vdc at 250 ma nom.
28 Vdc 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)
( $50 \mathrm{GHz}-2.4 \mathrm{~mm}$ ) ( $65 \mathrm{GHz}-1.85 \mathrm{~mm}$ )
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.
(6) "TL" for TTL Driver if desired
(2) "Min" for outboard mountings or "Minin"
(7) "26" for 26.5 GHz option., "40" for 40 GHz option, for inboard mountings. 40 GHz is inboard only.
" 50 " for 50 GHz option, " 65 " for 65 GHz option
(3) "A" for 115 Vac , "D" for 28 Vdc or " $H$ " for 12 Vdc .
(8) "Arc" for Arc Suppression diodes (N/A with TTL
(4) "l" for indicators if desired. and Latching)
(5) "L" for latching cutthroat if desired.

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

## Outline Drawing



