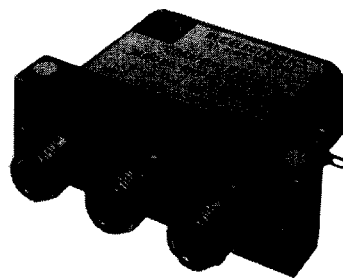


# High Power Coaxial Switches



RLC Electronics' High Power Coaxial Switch is a single pole two position type. The switch provides extremely high reliability, long life and excellent performance characteristics over the frequency range of DC-6GHz. The switches will handle 2000 watts at 100 MHz to 400 watts at 6 GHz. The switches utilize thermally conductive, dielectric insulators to allow the high power handling capabilities.

The package utilizes high density packaging techniques, hence the overall volume of the switch is less than 6 cubic inches. The switch is available in the following configurations-manual or remote, type N, TNC, HN or SC Connectors, 12 Vdc, 28 Vdc or 115 Vac operation, with or without indicator terminals, fail-safe or latching cutthroat.

## Specifications

S<sup>1</sup>.P.2.2.3.4.5.6

<b>Switch Type:</b>	Single pole, two position	
<b>Frequency Range:</b>	DC-6 GHz	
<b>Insertion Loss: (max)</b>	DC-4 GHz	4-6 GHz
	0.2 dB	0.5 dB
<b>VSWR: (max)</b>	1.25	1.5
<b>Isolation: (min)</b>	60 dB	60 dB

**Power Rating, RF, Cold Switching:** See page 2.

**Impedance:** 50 ohms.

**Operating Power 25°C:**

**(Failsafe):** 12 Vdc at 480 ma nom. 28 Vdc at 200 ma nom. 115 Vac at 50 ma nom.

**(Latching):** 12 Vdc at 1 amp nom. 28 Vdc at 430 ma nom. 115 Vac at 50 ma nom. Current applied 10 ms min.; cutthroat circuitry (standard), recovery time 100 ms nom.

**Connectors, RF:** N, SC,HN, TNC, Female.

**Connectors, Power:** Feed through solder lugs.

(HN not recommended for use above 4 GHz)

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

**Switching Time:** 20 milliseconds max.

**Weight:** 20 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 or "R" for Remote
- (2) "S" for SC, "H" for HN, "N", "T" for TNC
- (3) "A" for 115 Vac "D" for 28 Vdc. or "H" for 12 Vdc

- (4) "I" for indicators if desired.
- (5) "L" for latching cut throat if desired.
- (6) "TL" for TTL Driver if desired.

**Example:** SRP-2-S-D-I is a remote operation, SC Connectors, 28 Vdc with indicators, failsafe operation 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.

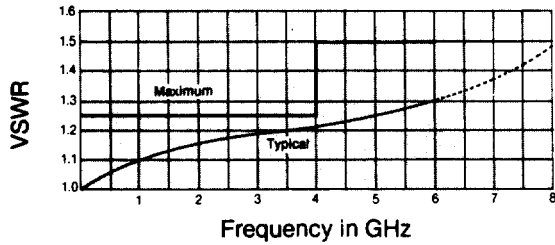


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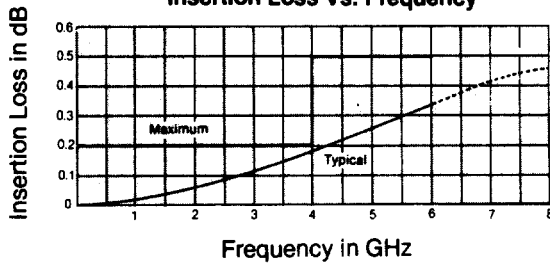
83 Radio Circle, Mt. Kisco, NY 10549  
(914) 241-1334 • FAX: 914-241-1753

# Typical Operating Curves

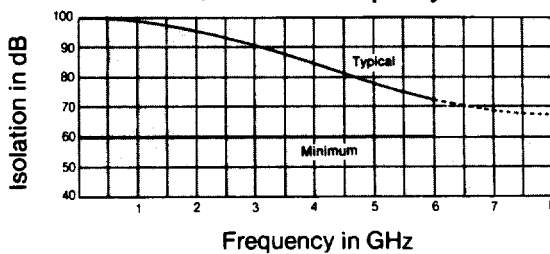
VSWR Vs. Frequency



Insertion Loss Vs. Frequency

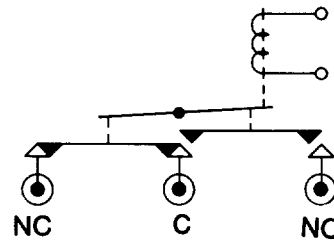


Isolation Vs. Frequency

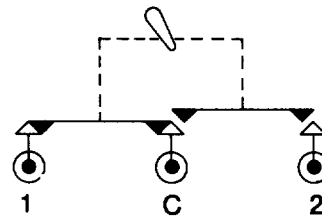


# Schematics

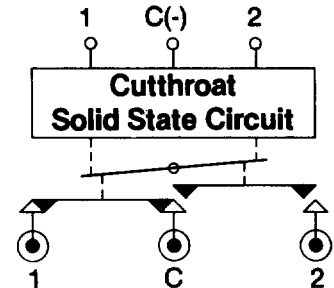
Failsafe



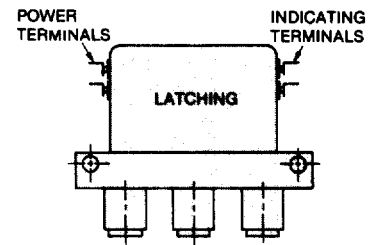
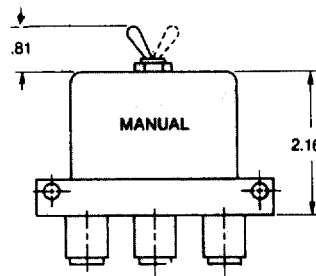
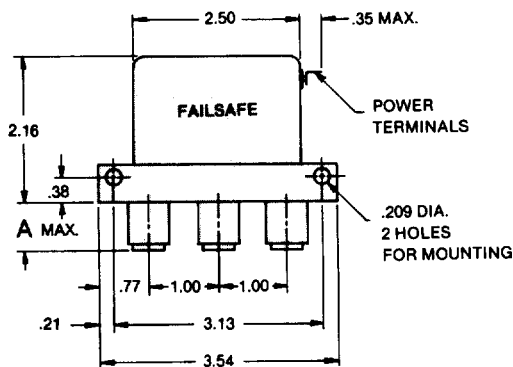
Manual



Latching



# Outlines



CONN	A
N	.70
SC	.70
HN	.70
TNC	1.00
Width of all units 1.03 in.	

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

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