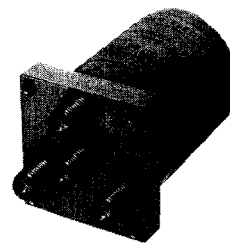


# Miniature Multi-Position Coaxial Switches



RLC Electronics' Miniature Multi-Position Coaxial Switch line provides extremely high reliability, long life and outstanding electrical performance by utilizing high density packaging. The "Multi-Min" electrical characteristics features low insertion loss and VSWR over the entire DC-18 GHz range, with an option

to 26.5 GHz, while maintaining high isolation. The switch is available in the following configurations-manual or remote, 12 Vdc, 28 Vdc or 115 Vac operation, with or without indicator terminals, with or without TTL drivers.

## Specifications

S<sup>1-2</sup>MIN-3-4-5-6

RF POSITIONS	3	4	5	6
Switch type:	SP-3T	SP-4T	SP-5T	SP-6T
Frequency Range: (GHz)	DC-18 (18-26.5 option)	DC-18 (18-26.5 option)	DC-18 (18-26.5 option)	DC-18 (18-26.5 option)
Insertion Loss:(db) (max)				
DC-4	0.20	0.20	0.20	0.20
4-12.4 GHz	0.30	0.30	0.30	0.30
12.4-18 GHz	0.50	0.50	0.50	0.50
18-26 GHz (option)	1.00	1.00	1.00	1.00
VSWR (max)				
DC-4	1.25	1.25	1.25	1.25
4-12.4 GHz	1.40	1.40	1.40	1.40
12.4-18 GHz	1.50	1.50	1.50	1.50
18-26 GHz (option)	2.00	2.00	2.00	2.00
Isolation: (dB) (min)				
DC-18 GHz	60	60	60	60
18-26 GHz (option)	50	50	50	50

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

Impedance: 50 ohms.

Operating Power 25°:

(Failsafe): 12 Vdc at 300ma nom.

28 Vdc at 90 ma nom.

115 Vac at 25 ma nom.

Connectors, RF: SMA Female

Connectors, Power: Feed through solder lugs.

Life: 1,000,000 operations.

Switching Time: 15 milliseconds max.

Weight: 3 position 7 oz., others 12 oz.

Environmental Conditions: MIL-S-3928

Operating Mode: Manual or failsafe.

Switching Sequence: Break before make.

### To designate the switch desired use:

- (1) "M" for Manual or "R" for Remote.
- (2) "3", "4", "5" or "6" throw operation.
- (3) "A" for 115 Vac, "D" for 28 Vdc, or "H" for 12 Vdc.

- (4) "I" for indicators if desired.
- (5) "TL" for TTL Driver if desired.
- (6) "26" for the 26.5 GHz option.

**Example:** SR-4 Min-D-26 is a remote operation, 28 Vdc, without indicators, failsafe switch, 26.5 GHz operation.

Specials requiring closer tolerances, different frequency ranges, special connectors, different materials, finishes, etc., can be furnished upon request. Specifications subject to change without notice.

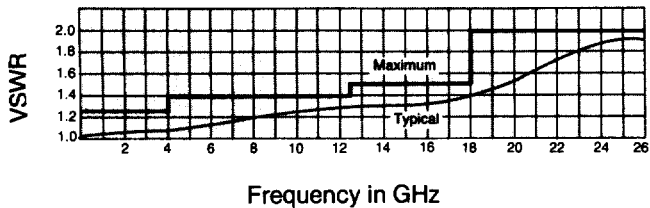


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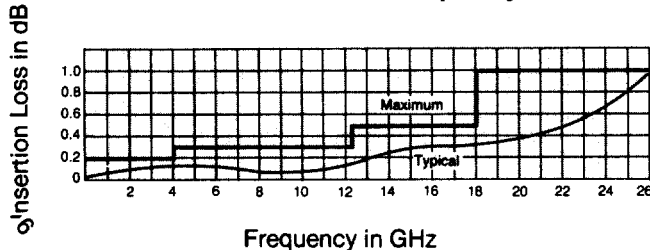
83 Radio Circle, Mt. Kisco, NY 10549  
(914) 241-1334 • FAX: 914-241-1753

# Typical Operating Curves

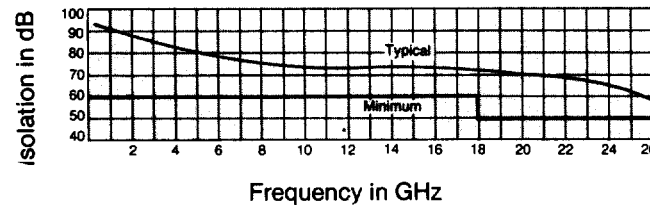
VSWR Vs. Frequency



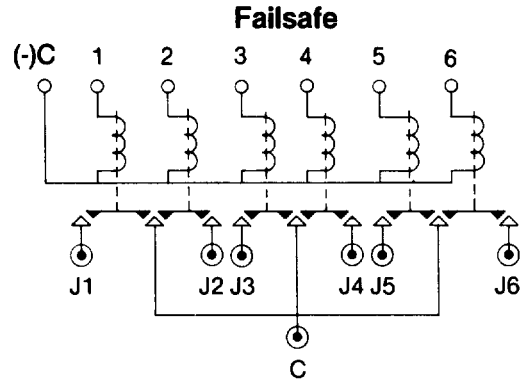
Insertion Loss Vs. Frequency



Isolation Vs. Frequency

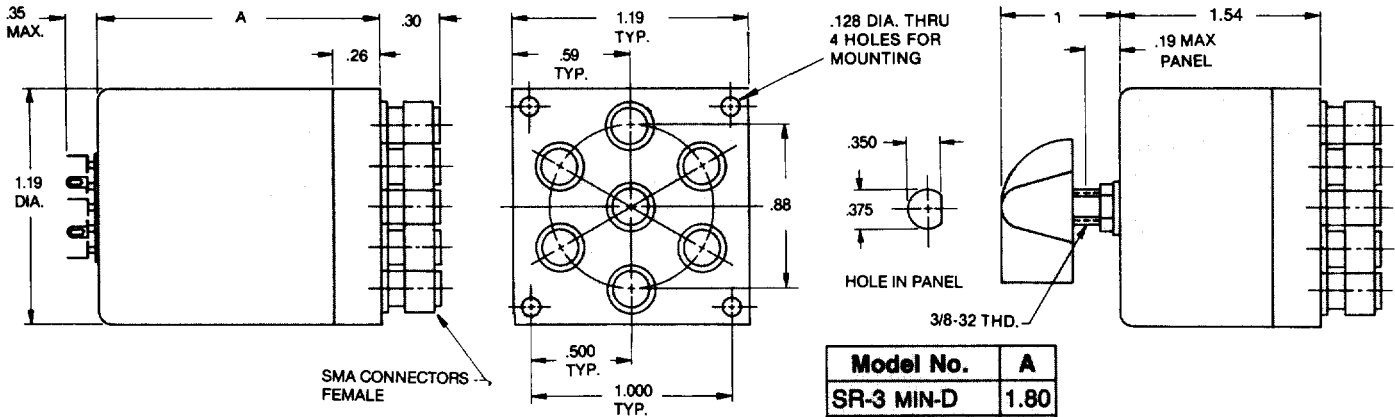


# Schematics



3 TO 6 POSITIONS  
ALL POSITIONS NORMALLY OPEN

# Outlines



\*4,5,6

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

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