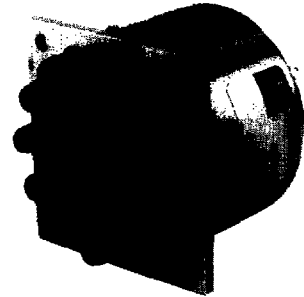


# Type C Multi-Position Coaxial Switches (7 to 12 Position)



RLC Electronics' Mid-size, Extended Multi-Position Coaxial Switch line provides up to 12 positions in an extremely high reliability, long life and outstanding electrical performance by utilizing high density packaging. The "Multi-C" electrical characteristics features extremely

low insertion loss and VSWR over the entire DC-18 GHz range while maintaining high isolation. The switch is available in the following configurations-manual or remote, 12 Vdc or 28 Vdc operation, with or without indicator terminals, with or without TTL drivers.

## Specifications

S1.2C<sup>3,4,5,6</sup>

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: (db) (max)							
DC-6 GHz		0.30	0.30	0.30	0.30	0.30	0.30
6-12 GHz		0.50	0.50	0.50	0.50	0.50	0.50
12-16 GHz		0.70	0.70	0.70	0.70	0.70	0.70
16-18 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
6-12 GHz		1.50	1.50	1.50	1.50	1.50	1.50
12-16 GHz		1.70	1.70	1.70	1.70	1.70	1.70
16-18 GHz		1.80	1.80	1.80	1.80	1.80	1.80
Isolation: (db) (min)							
DC-12 GHz		60	60	60	60	50	50
12-18 GHz		55	55	55	55	50	50

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

Impedance: 50 ohms.

Operating Power 25° C:

(Failsafe): 28 Vdc at 150 ma nom.  
12 Vdc at 333 ma nom.

Connectors, RF: SMA. Female.

Connectors, Power: Solder connections.

Life: 1,000,000 operations.

Switching Time: 15 milliseconds max.

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.                        | (4) "I" for indicators if desired.  |
| (2) "7C", "8C", "9C", "10C", "11C" or "12C" throw operation. | (5) "TL" for TTL driver if desired. |
| (3) "D" for 28 Vdc or "H" for 12 Vdc voltage.                | (6) "26" for 26.5 GHz options.      |

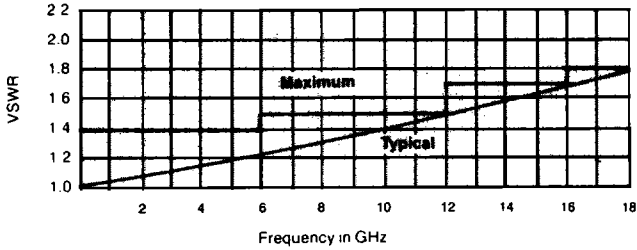
Example: SR-10C-D-I is a remote, ten position, 28 Vdc, with indicators switch.

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

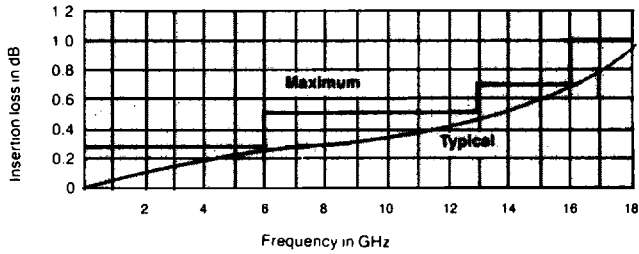


# Typical Operating Curves

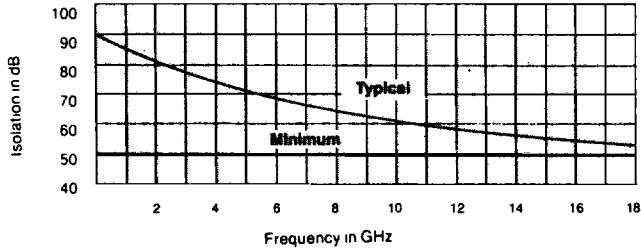
## VSWR Vs. Frequency



## Insertion Loss Vs. Frequency

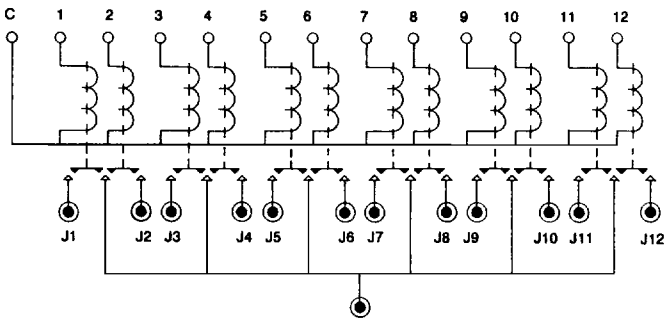


## Isolation Vs. Frequency



# Schematic

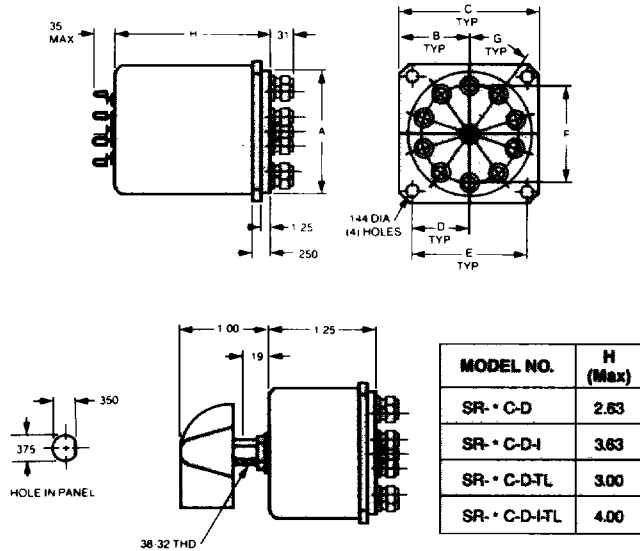
## Failsafe



7 TO 12 POSITIONS  
ALL POSITIONS NORMALLY OPEN

# Outlines

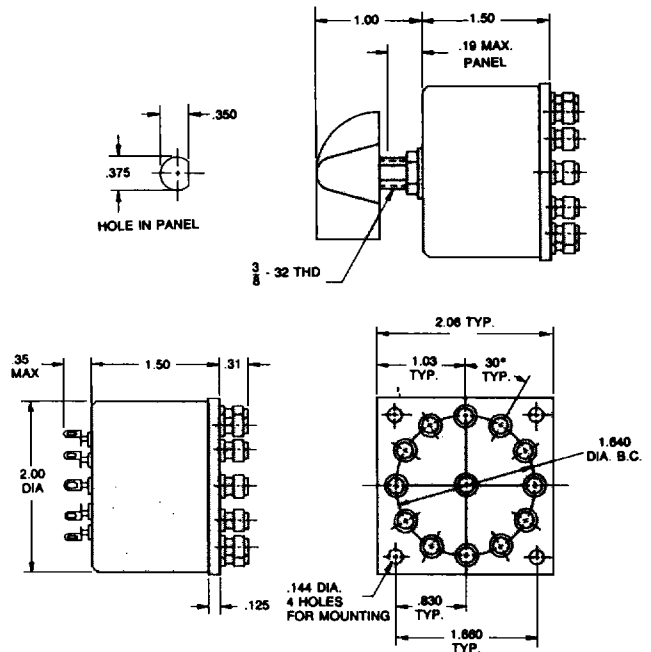
## 7-10 POS.



MODEL NO.	A	B	C	D	E	F	G
SR-7C-D	1.568	.875	1.750	.687	1.375	1.120	45°
SR-9C-D	1.800	1.000	2.000	.812	1.625	1.400	36°
SR-10C-D							

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

## 11-12 POS.



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