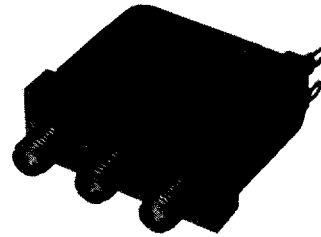


Miniature Coaxial Switches



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-18.0 GHz with options to 26.5 GHz and 40 GHz. The miniature package utilizes high density packaging techni-

ques, hence the overall volume of the switch is less than 3/4 cubic inch. The switch is available in the following configurations — manual or remote, inboard or outboard mounting holes, 12 Vdc, 28 Vdc or 115 Vac operation, with or without indicator terminals, failsafe or latching cutthroat, with or without TTL drivers.

Specifications

S1-2MIN^{2,3,4,5,6,7,8}

Switch Type	Single Pole Two Position										
	DC-18 GHz			26.5 Opt.	40 GHz Option						
Frequency Range	DC-4			4-12.4	12.4-18	18-26.5	DC-6	6-12	12-18	18-26.5	26.5-40
Frequency (GHz)	0.1 dB	0.2 dB	0.3 dB	0.5 dB	0.2 dB	0.4 dB	0.5 dB	0.7 dB	0.9 dB		
Insertion Loss (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		
VSWR (Max)	80 dB	70 dB	60 dB	50 dB	70 dB	60 dB	60 dB	55 dB	50 dB		
Isolation (Min)											

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

Impedance: 50 ohms.

Operating Power 25°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.

Connectors, Power: Feed through solder lugs.

Life: 1,000,000 operations.

Switching Time: 15 milliseconds 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 cut throat if desired.
- (6) "TL" for TTL Driver if desired.
- (7) "26" for 26.5 GHz option, "40" for 40 GHz option.
- (8) "Arc" for Arc Supression 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.

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



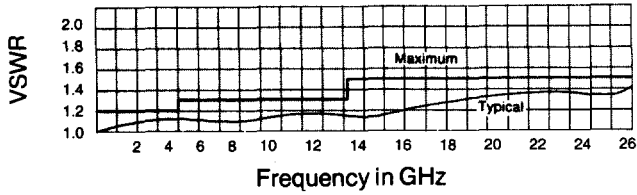
RLC ELECTRONICS, INC.

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

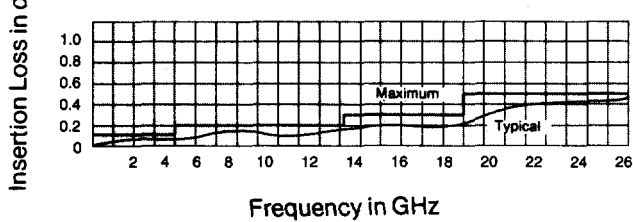
Typical Operating Curves

DC-18 & DC-26 GHz Switches

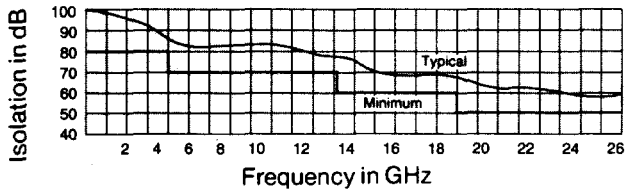
VSWR Vs. Frequency



Insertion Loss Vs. Frequency

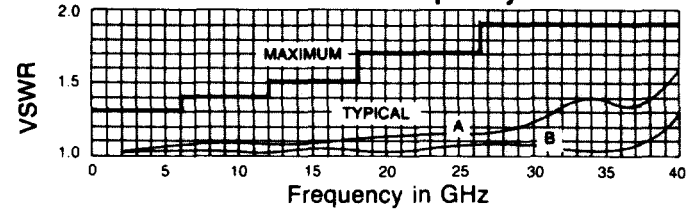


Isolation Vs. Frequency

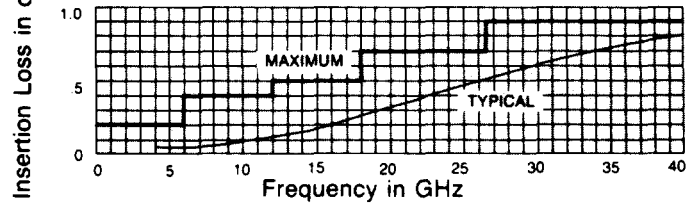


DC-40 GHz Switches

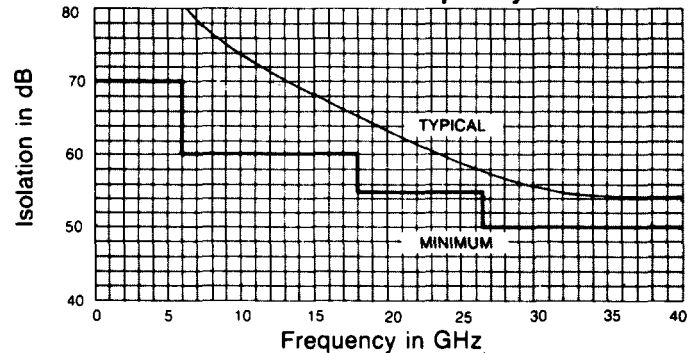
VSWR Vs. Frequency



Insertion Loss Vs. Frequency

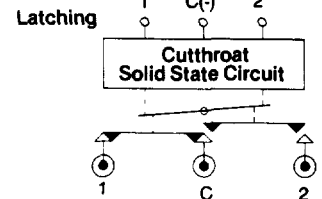
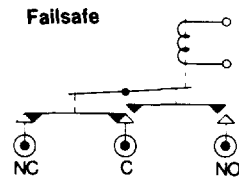


Isolation Vs. Frequency

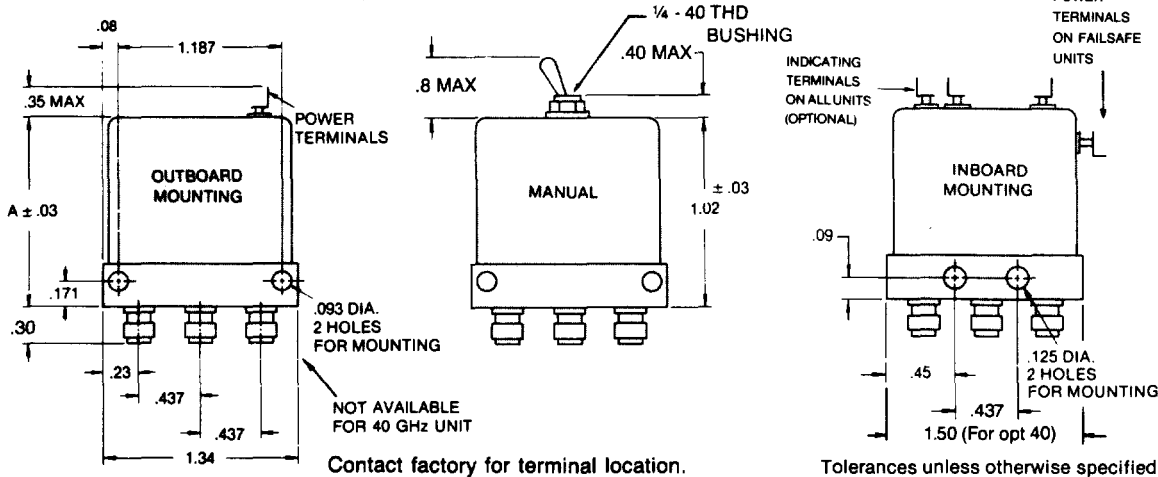


A = SR-2 Min IN-D-40 with Connectors
B = Two Connectors Back to Back

Schematics



Outline



MODEL NO.	A
SR-2 Min-D	1.18
SR-2 Min-D-I	1.59
SR-2 Min-D-L	1.60
SR-2 Min-D-I-L	1.81
SR-2 Min-D-TL	1.85
SR-2 Min-D-I-TL	1.85
SR-2 Min-D-I-L-TL	1.81
Add to Above For 115 VAC	.42
2 Min-in and 2 Min-H Units same as 2 Min	
Width of all units .80 in	

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

