

RSM

## RSM SERIES SWITCHES SINGLE POLE, DOUBLE THROW

Renaissance Electronics RSM family of switches are broadband, DC-20 GHz switches of single pole, double throw and are designed to switch RF and Microwave signals from a common input to either of two, break before make outputs. The switches offer extremely low insertion loss, minimal VSWR, and very high isolation. The RSM family of switches are currently available in five operating modes. Designed for high reliability and consistent performance, RSM Series switches are available in standard and custom configurations.

### FEATURES:

- Low insertion loss and high isolation: better signal integrity and less crosstalk.
- Long term reliability: reduce your system maintenance cost.
- High power handling capability: parts commonality reduces inventory.
- Excellent repeatability: improve your yield and lower your cost.

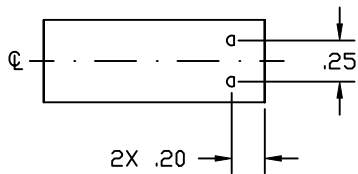
### OPERATING MODES:

- Failsafe
- Failsafe with TTL logic
- Latching
- Latching with TTL logic
- Indicators

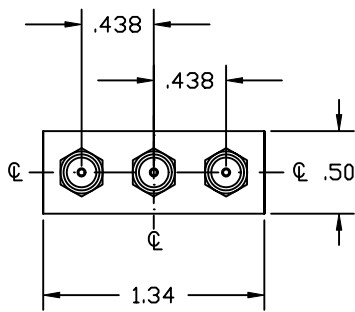
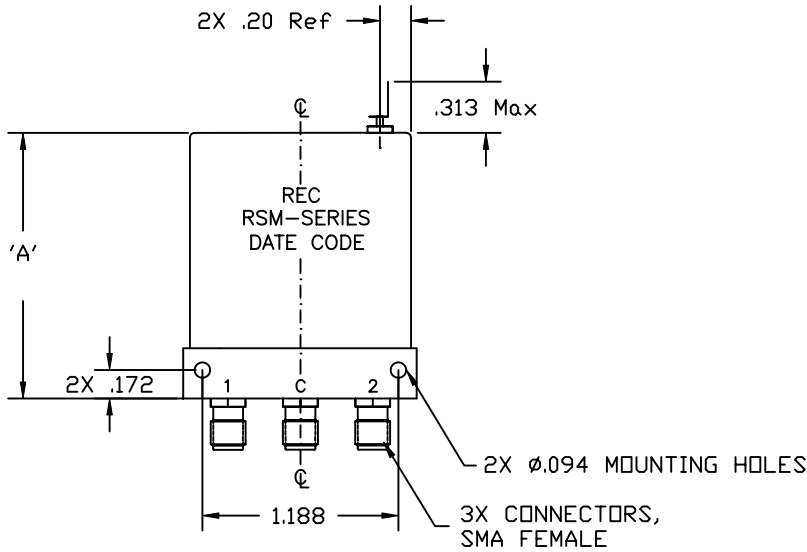
### SPECIFICATIONS:

#### Common Specifications

Switch Type:	1 Pole, 2 Position
Frequency Range:	DC – 20 GHz
Impedance:	50 ohms
Connectors:	SMA Female
Bias Connection:	Solder Terminals
Switch Time:	20 milliseconds maximum
Life:	1,000,000 Cycles minimum
<b>Operating Environment</b>	
Operating Temperature:	0 to +70°C, -40 to +85°C ≤ 30% humidity
Storage Temperature:	-65 to +125°C



HOW TO ORDER - COAXIAL SWITCHES



Dimension A: Failsafe Dimention 1.22 maximum  
 All Others 1.61 maximum

MODEL: \_\_\_\_\_ RS X - X X - X - X X

CONNECTOR: \_\_\_\_\_  
 M = SMA (F)

THROWS: \_\_\_\_\_  
 1  
 2

CURRENT: \_\_\_\_\_  
 A = ALTERNATING (failsafe only)  
 D = DIRECT

OPTIONS: \_\_\_\_\_  
 L = LATCHING  
 TTL = TTL  
 I = INDICATOR

VOLTAGE: \_\_\_\_\_  
 12  
 15  
 21  
 28

MOUNTING OPTION: \_\_\_\_\_  
 M = INBOARD MOUNTING

ELECTRICAL CHARACTERISTICS:

Frequency Range GHz	Insertion Loss dB max	Port-to-Port Isolation dB min	VSWR	Maximum Switching Time mS	CW RF Power Handling Watts max	DC Supply Volts @ 100 mA max
DC-20	≤ 0.2 @ 3 GHz	> 75 @ 3 GHz	< 1.2 @ 3 GHz	20	200 @ 3 GHz	+28*
	≤ 0.3 @ 8 GHz	> 70 @ 8 GHz	< 1.3 @ 8 GHz		70 @ 8 GHz	
	≤ 0.4 @ 12 GHz	> 60 @ 12 GHz	< 1.4 @ 12 GHz		60 @ 12 GHz	
	≤ 0.5 @ 20 GHz	> 60 @ 20 GHz	< 1.5 @ 20 GHz		50 @ 20 GHz	

\*Other voltages available



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Tel: 978 772-7774 Fax: 978 772-7775 www.rec-usa.com sales@rec-usa.com © 2003 Renaissance Electronics Corp. 6/03