### **Series SM**

# General Specifications

#### **Electrical Capacity (Resistive Load)**

Maximum Level: Minimum Level:

500mA @ 12V DC 1.0mA maximum @ 10mV AC/DC maximum

#### **Other Ratings**

Contact Resistance:	30 milliohms maximum
Insulation Resistance:	100 megohms minimum @ 500V DC
Dielectric Strength:	500V AC for 1 minute minimum
Mechanical Life:	1,000 operations minimum
Electrical Life:	1,000 operations minimum
Nominal Operating Force:	2.0N
Contact Timing:	Nonshorting (Break-before-make)
Total Travel:	.063″ (1.6mm)

#### **Materials & Finishes**

Actuator:	Glass fiber reinforced polyester (UL94V-0)
Case:	Glass fiber reinforced polyamide (UL94V-0)
Lower Case:	Glass fiber reinforced polyester (UL94V-0)
Movable Contacts:	Brass with gold plating over nickel
Stationary Contacts	Brass with gold plating over nickel
Terminals:	Brass with gold plating over nickel

#### **Environmental Data** н

	-40°C through +85°C (-40°F through +185°F)
,	90-95% humidity for 96 hours @ 40°C (104°F)
Vibration:	10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning
	in 1 minute; 3 right angled directions for 2 hours
Shock:	50G (490m/s <sup>2</sup> ) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)
PCB Processing	
•	Wave Soldering Recommended: See Profile A in Supplement section.
3	Manual Soldering: See Profile B in Supplement section.
Cleaning:	These devices are not process sealed. Hand clean locally using alcohol based solution.
	Operating Temp Range: Humidity: Vibration: Shock: PCB Processing Soldering: Cleanina:

#### **Standards & Certifications**

Actuator and lower case of glass fiber reinforced polyester and case of glass fiber reinforced polyamide UL94V-0 The SM series devices have not been tested for UL recognition and CSA certification. These switches are designed for use in a low-voltage, low-current circuit. When used as intended in a low-voltage, low-current circuit, the results do not produce hazardous energy.

Toggles

Touch



Toggles

Rockers

Keylocks Programmable Illuminated PB Pushbuttons

Rotaries

Slides

Touch

Indicators

Supplement Accessories

## **Distinctive Characteristics**

Very compact dimensions allow for high density, side-by-side or end-to-end mounting within tight dimensional applications.

Detent mechanism provides positive actuation to indicate circuit status.

Visible indication of position by spot on top of red actuator and through window on side.

Twin sliding contact mechanism with self-cleaning action provides smooth actuation and produces high contact reliability.

.100" x .100" (2.54mm x .2.54mm) center-to-center inch terminal spacing allows standard PC board mounting in side-by-side or end-to-end arrangements.

Insert molded terminals lock out flux, solvents, and other contaminants.





CIRCUITS				
Con	nected Termi	nals	Throw & Schematics	
nt L	Center	Left	Note: Terminal numbers are on the switch.	- 1: 1:

	Slide Position			Connected Terminals			Throw & Schematics
Model	Right	Center	Left	Right	Center	Left	Note: Terminal numbers are on the switch.
SM0320102	ON	NONE	ON	1-3	OPEN	1-2	SPDT 1 (COM)

**POLES &** 

#### **TYPICAL SWITCH DIMENSIONS**

