



Features

- Double contacts
- Low contact resistance
- Self-clean on contact area
- Vapor phase solderable, IR-reflow solderable
- Terminal plating by gold gives excellent results when soldering
- RoHS compliant*



SDM Series Surface Mount DIP Switch

Electrical Characteristics

Electrical Life2,000 operations min. per switch, 24 VDC, 25 mA
 Non-Switching Rating100 mA, 50 VDC
 Switching Rating25 mA, 24 VDC
 Contact Resistance (@ current 100mA)
50 milliohms max. at initial
100 milliohms max. after life test
 Insulation Resistance
100 megohms min. at 500 ±15 VDC
 Dielectric Strength500 VDC/minute
 Capacitance5 pF max. between adjacent closed switch
 CircuitSingle pole single throw

Environmental Characteristics

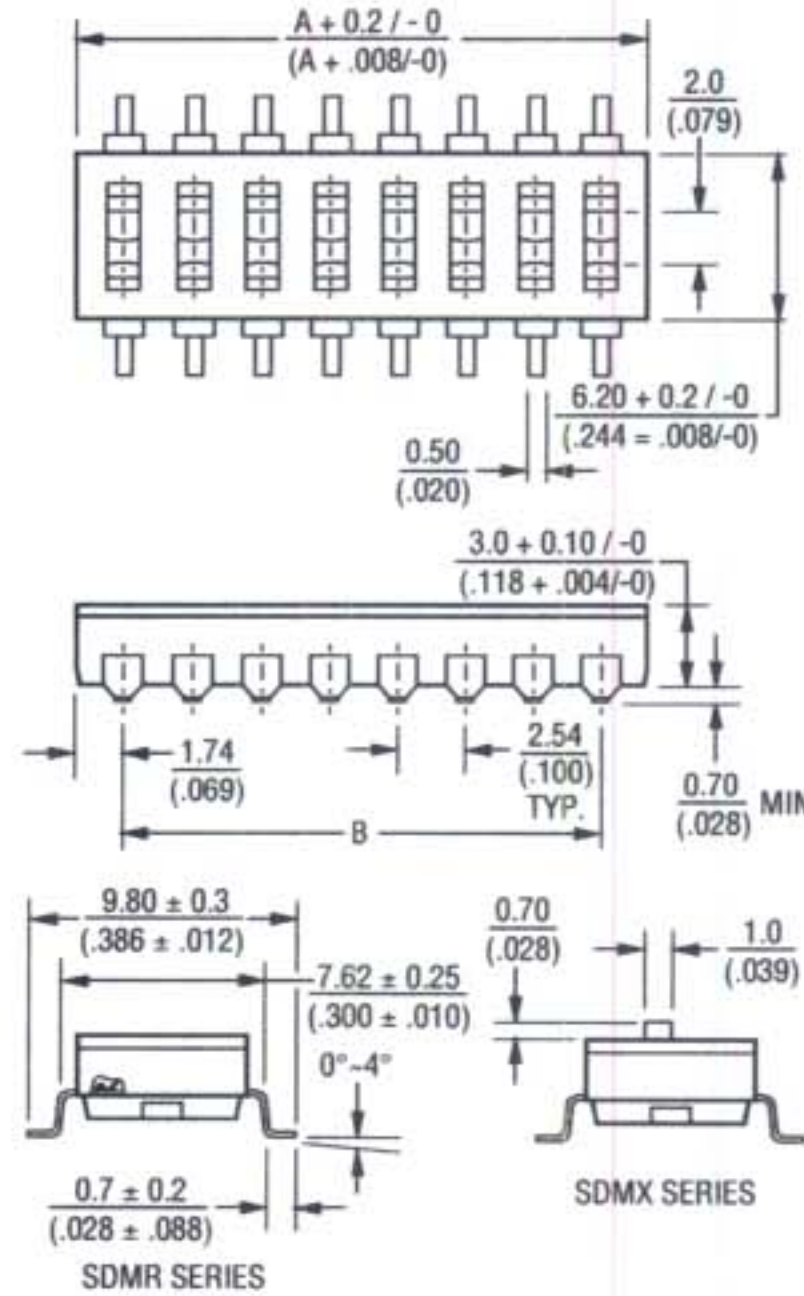
Mechanical Life ..2,000 operations per switch
 Operation Force1000 gf max.
 Stroke1.0 mm
 Operating Temp. Range-20 °C to +70 °C
 Storage Temperature-40 °C to +85 °C
 Vibration TestMIL-STD-202F, Method 201A
 Frequency10-55-10 Hz/1 minute
 DirectionsX,Y,Z, three mutually perpendicular directions
 Time2 hours each direction.
 High reliability
 Shock TestMIL-STD-202F, Method 213B, Condition A
 Gravity50 G (peak value), 11 msec
 Direction & Times6 sides and 3 times in each direction.
 High reliability

Physical Characteristics

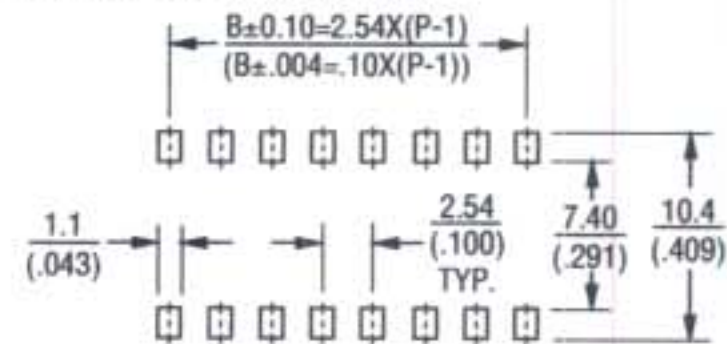
Base and Cover Materials
 ..UL94V-0 PPS plus glass fiber reinforced
 ColorBlack
 Actuator MaterialsNylon plus glass fiber reinforced
 ColorWhite
 Contact MaterialsAlloy copper
 Terminal MaterialsBrass
 Contact Plating Materials3 micro inches gold plating over 40 micro inches nickel
 Terminal Plating MaterialsGold
 Soldering ProcessVapor phase and IR-reflow soldering can be applied
 Standard Packaging
IC tubes/all poles in the "off" position

Product Dimensions

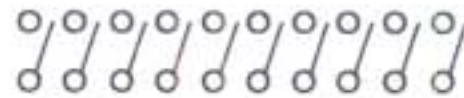
SDM Series



RECOMMENDED PCB LAYOUT



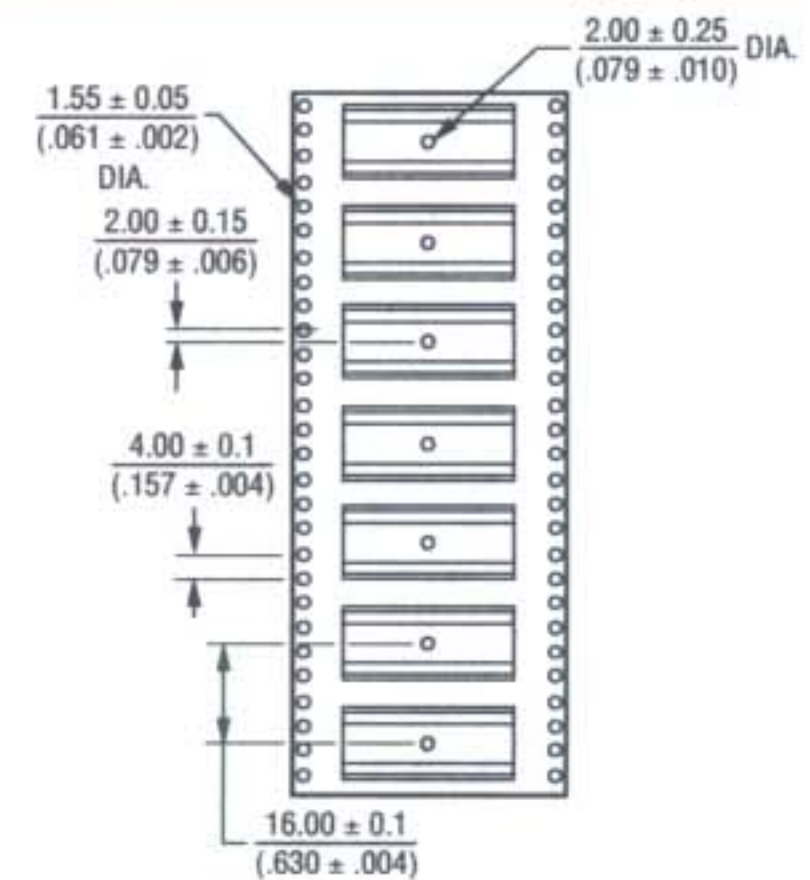
SCHEMATIC (TYP.)
 1,2,3,4,5,6,7,8,9,10,12 POSITIONS AVAILABLE



MODEL NO.	POSITIONS	DIM. A	DIM. B
SDM-12	12	31.42	27.94
SDM-10	10	26.34	22.86
SDM-8	8	21.26	17.78
SDM-6	6	16.18	12.70
SDM-4	4	11.10	7.62
SDM-2	2	6.02	2.54

DIMENSIONS: MM (IN)

Packaging Specifications



POLE	TAPE SIZE (W)
2,3	16 mm
4,5,6	24 mm
7,8	32 mm
9,10,12	44 mm

How to Order

Model **SDM R - 2 - T R**

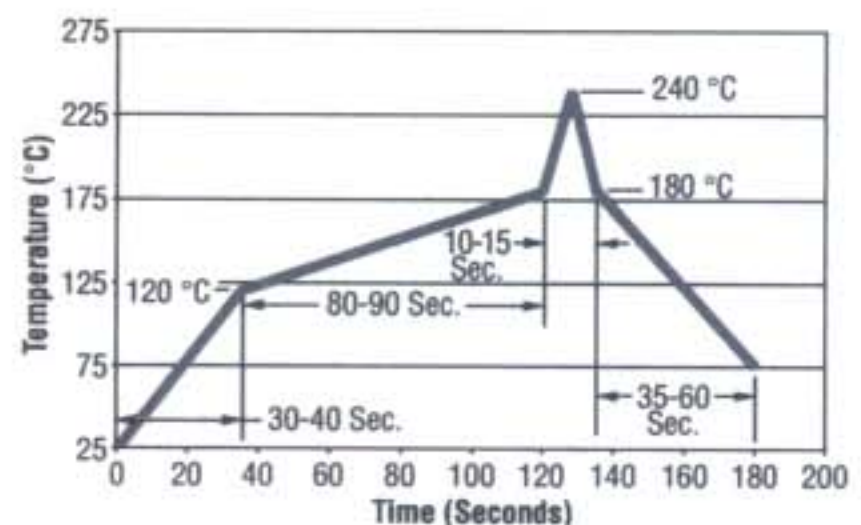
Actuator
 • X = Raised Actuator
 • R = Recessed Actuator

Number of Positions
 • 1 = 1 Position
 • 2 = 2 Positions
 • 3 = 3 Positions
 • 4 = 4 Positions
 • 5 = 5 Positions
 • 6 = 6 Positions
 • 7 = 7 Positions
 • 8 = 8 Positions
 • 9 = 9 Positions
 • 10 = 10 Positions
 • 12 = 12 Positions

Seal
 • X = Standard (Not Sealed)
 • T = Top Tape Sealed ("R" Actuator only)

Packaging Option
 (Top Sealed, Recessed only)
 • R = Tape and Reel Packaging (900 pcs./reel)

Reflow Soldering Profile



REV. 02/06

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.