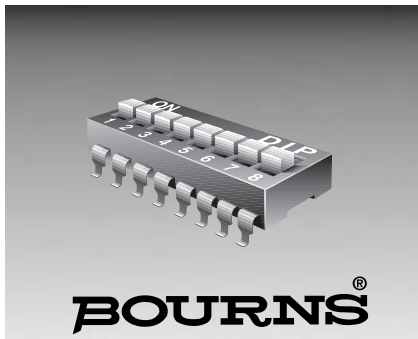




## Features

- 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

## Applications

- PC interface boards
- LANs
- Auto dialing systems
- Remote controlled systems

# SDM Series Surface Mount DIP Switch

## Electrical Characteristics

Electrical Life .....2,000 operations min.  
per switch, 24VDC, 25mA  
Non-Switching Rating .....100mA, 50VDC  
Switching Rating .....25mA, 24 VDC  
Contact Resistance (@ current 100mA)  
.....50 milliohms max. at initial  
100 milliohms max. after life test  
Insulation Resistance  
.....100 megohms min. at 500 ±15VDC  
Dielectric Strength .....500VDC/minute  
Capacitance .....5pF max. between  
adjacent closed switch  
Circuit .....Single pole single throw

## Environmental Characteristics

Mechanical Life..2,000 operations per switch  
Operation Force .....800g max.  
Stroke.....1.0mm  
Operating Temp. Range.....-40°C to +85°C  
Storage Temperature .....-40°C to +85°C  
Vibration Test .....MIL-STD-202F,  
Method 201A  
Frequency .....10-55-10 Hz/1 minute  
Directions .....X,Y,Z, three mutually  
perpendicular directions  
Time.....2 hours each direction.  
High reliability  
Shock Test .....MIL-STD-202F,  
Method 213B, Condition A  
Gravity .....50G (peak value), 11 msec  
Direction & Times.....6 sides and  
3 times in each direction.  
High reliability

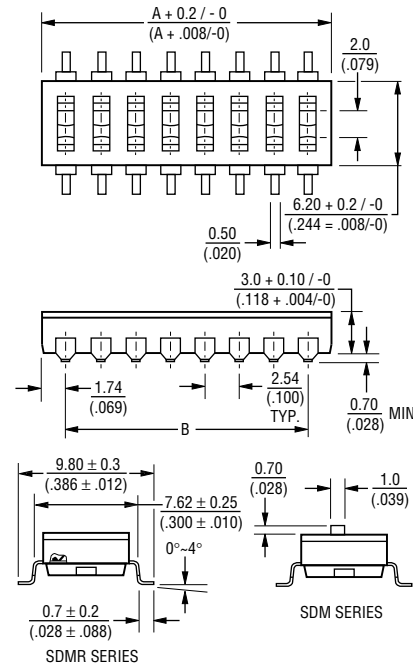
## Physical Characteristics

Base and Cover Materials  
..UL94V-0 PPS plus glass fiber reinforced  
Color .....Black  
Actuator Materials .....Nylon  
plus glass fiber reinforced  
Color .....White  
Contact Materials .....Alloy copper  
Terminal Materials .....Brass  
Contact Plating Materials .....3 micro inches  
gold plating over 40 micro inches nickel  
Terminal Plating Materials .....Gold  
Soldering Process .....Vapor phase and  
IR-reflow soldering can be applied  
Cleaning Process .....Freon TE, TF or  
trichloromethane by ultrasonic  
wave washing for 2 minutes give  
excellent results

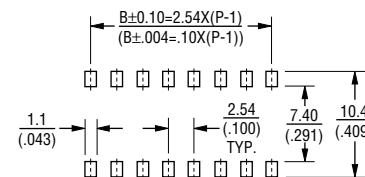
Standard Packaging  
.....IC tubes/all poles in the "off" position

## Product Dimensions

### SDM Series



### RECOMMENDED PCB LAYOUT



### SCHEMATIC (TYP.)

2,3,4,5,6,7,8,9,10,12 POSITIONS AVAILABLE

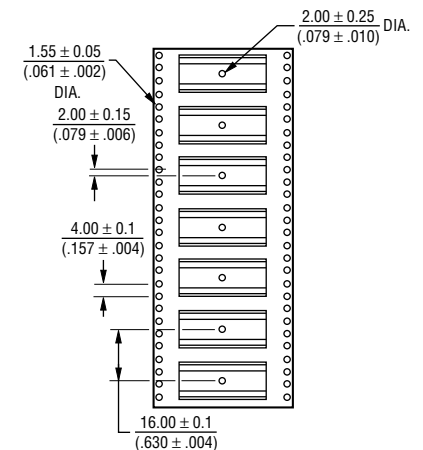


| MODEL NO. | POSITIONS | DIM. A | DIM. B |
|-----------|-----------|--------|--------|
| SDM-12    | 12        | 31.42  | 27.94  |
| SDM-10    | 10        | 26.34  | 22.86  |
| SDM-8     | 8         | 21.26  | 17.78  |
| SDM-6     | 6         | 16.18  | 12.70  |
| SDM-4     | 4         | 11.10  | 7.62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

DIMENSIONS:  $\frac{MM}{(IN)}$

## Packaging Specifications

### TAPE AND REEL PACKAGING SPECIFICATIONS



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

## How to Order

Model SDM R - 2 - T R

Actuator \_\_\_\_\_  
 • X = Raised Actuator  
 • R = Recessed Actuator

Number of Positions \_\_\_\_\_  
 • 2 = 2 Positions  
 • 4 = 4 Positions  
 • 6 = 6 Positions  
 • 8 = 8 Positions  
 • 10 = 10 Positions  
 • 12 = 12 Positions

Seal \_\_\_\_\_  
 • X = Standard (Not Sealed)  
 • T = Top Tap Sealed ("R" Actuator only)

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