

### 4.5 x 4.5mm Compact Tactile Switch

#### Features

##### Optimized Mechanical Features

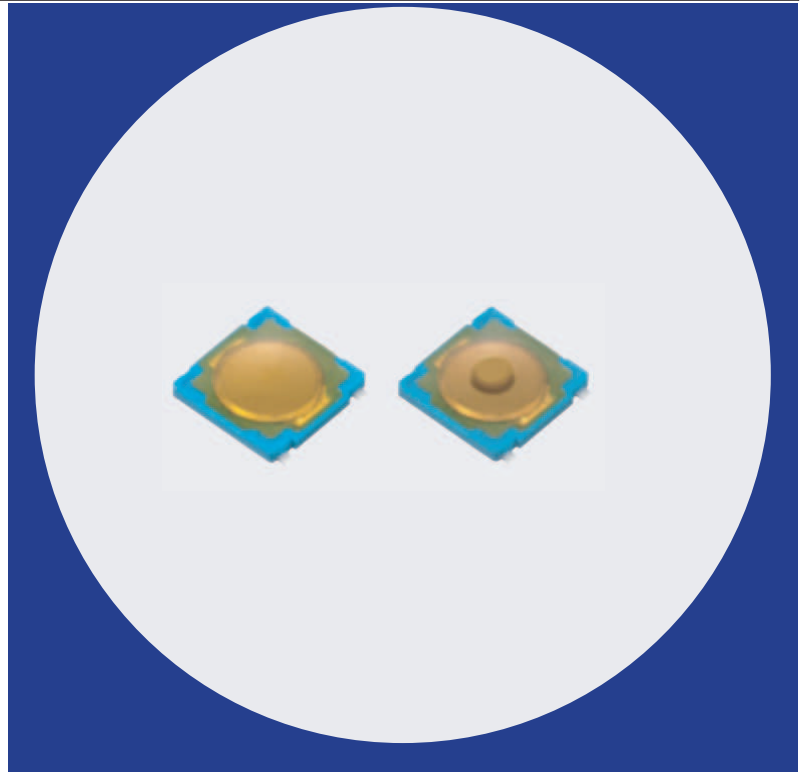
- Surface mount gull-wing terminal configuration
- Compatible with IR reflow and manual soldering
- Variety of operating force & actuator height options

##### Optimized Contact System

- Excellent tactile feedback

##### Materials

- Silver coated terminals for better solderability
- High temperature materials (UL94V-0)
- RoHS compliant



## Electrical and Mechanical Specifications

#### Switch Contact Resistance

100 milliohms maximum

#### Insulation Resistance

100 Megohms minimum between terminals

#### Maximum Rating

50mA, 12 VDC

#### Dielectric Strength

250 VAC for 1 minute between adjacent terminals

#### Operating Force

100, 160 gf or 260 gf

#### Travel

0.2<sup>+0.15</sup><sub>-0.1</sub> mm

#### Operating Temperature

- 40°C to +85°C

#### Storage Temperature

- 40°C to +85°C

#### Actuator Strength

3 Kgf maximum

#### Actuation Life

100 gf: 1,000,000 cycles ( flat surface), 500,000 cycles (button)

160 gf: 1,000,000 cycles ( flat surface), 500,000 cycles (button)

260 gf: 200,000 cycles

#### Allowable Solder Time

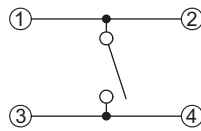
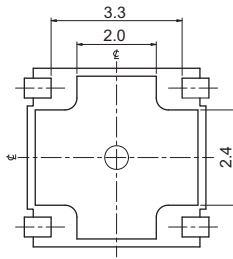
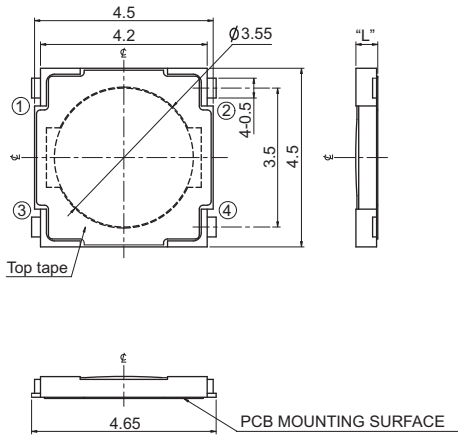
IR Reflow: Up to 5 seconds at 260°C.

Manual soldering: Up to 3 seconds at 350°C

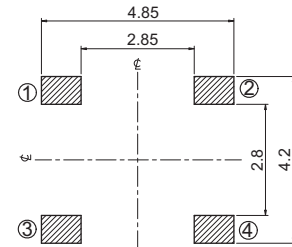
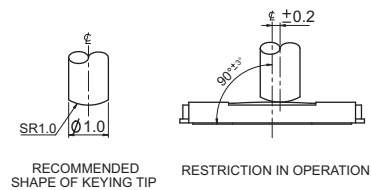
#### Packaging

Standard : Tape and reel packaging with 330mm diameter reel and 12mm wide plastic tape

## CTS SERIES 223BM1VA... - Surface Mount Gull Wing Type 1, Flat Surface



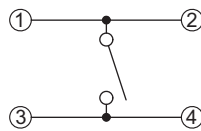
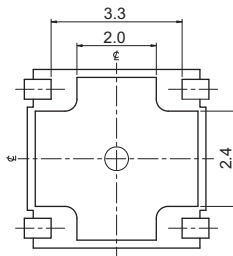
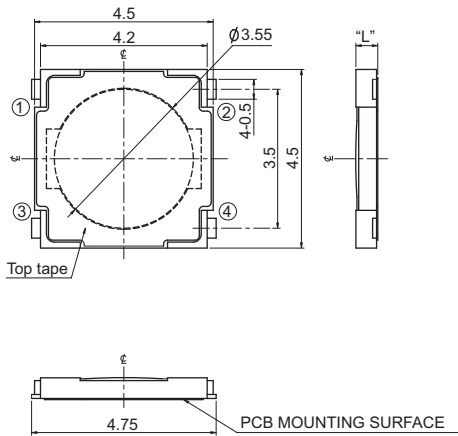
CIRCUIT DIAGRAM



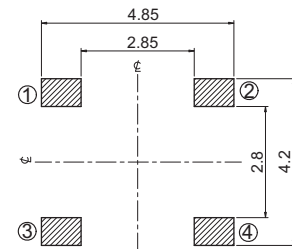
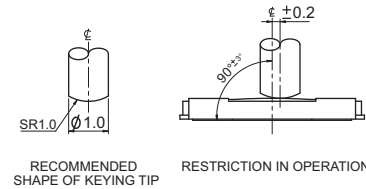
DIMENSION : mm  
STANDARD TOLERANCE :  
X (1 PLACE) : ±0.30

PCB LAYOUT

## CTS SERIES 223BM2VA... - Surface Mount Gull Wing Type 2, Flat Surface



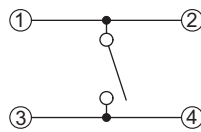
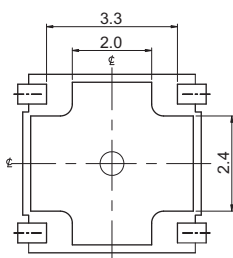
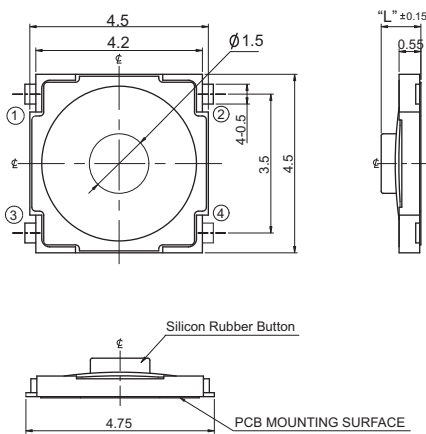
CIRCUIT DIAGRAM



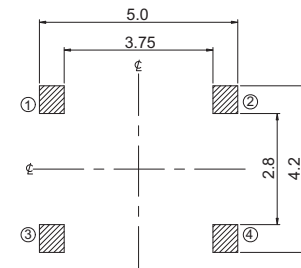
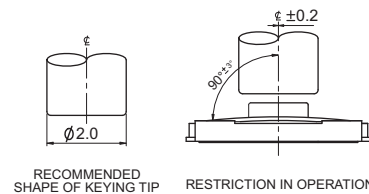
DIMENSION : mm  
STANDARD TOLERANCE :  
X (1 PLACE) : ±0.30

PCB LAYOUT

## CTS SERIES 223BM2VB... - Surface Mount Gull Wing Type 2, With Button



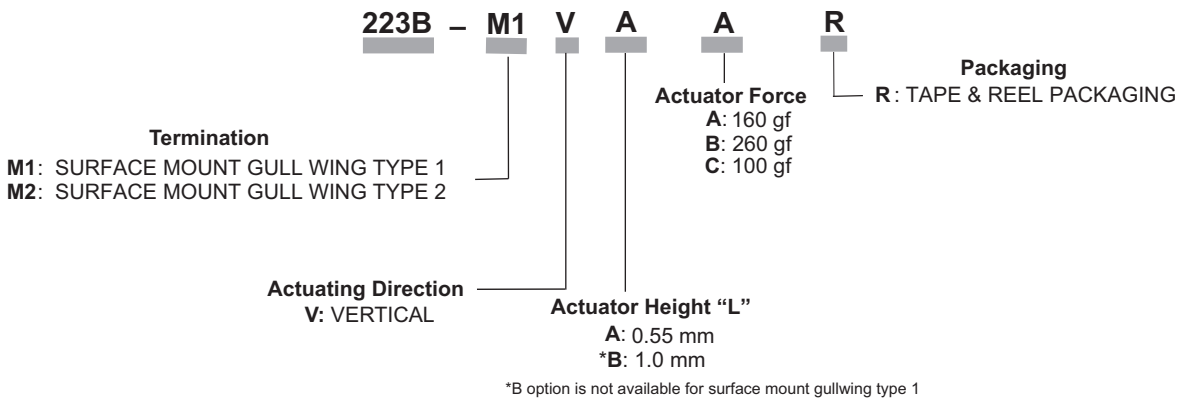
CIRCUIT DIAGRAM



DIMENSION : mm  
STANDARD TOLERANCE :  
X (1 PLACE) : ±0.30

PCB LAYOUT

## Ordering Information



### Note:

Consult CTS for other common features not listed.