

### 12 x 12mm Compact Tactile Switch

#### Features

##### Optimized Mechanical Features

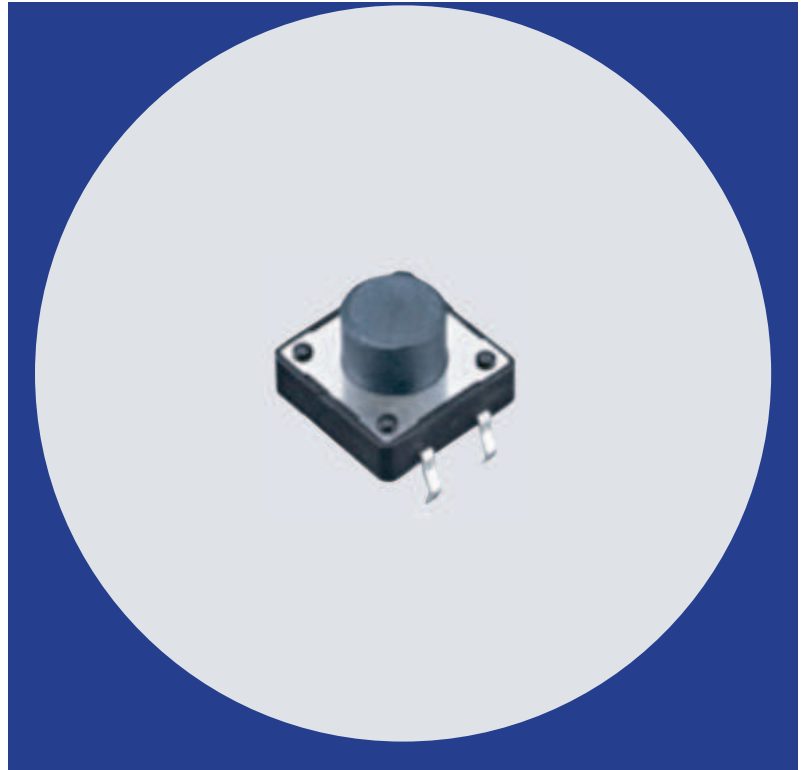
- Surface mount gull-wing terminal and standard through hole configurations
- Compatible with IR reflow, wave and manual soldering
- Compatible with automatically dip-soldering
- Variety of operating force & actuator height options

##### 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

160 or 260gf

#### Travel

0.3mm

#### Operating Temperature

- 40°C to +85°C

#### Storage Temperature

- 40°C to +85°C

#### Actuator Strength

3 Kgf maximum

#### Actuation Life

160 gf: 500,000 cycles

260 gf: 300,000 cycles

#### Allowable Solder Time

IR Reflow: Up to 5 seconds at 260°C

Wave soldering: Up to 5 seconds at 260°C

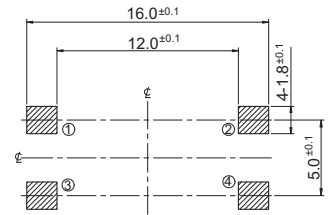
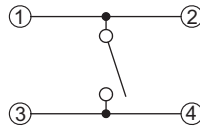
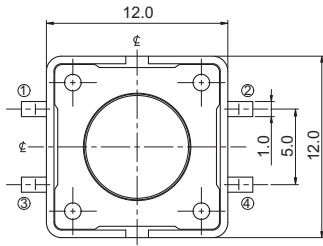
Manual soldering: Up to 3 seconds at 350°C

#### Packaging

Standard: Bag packaging

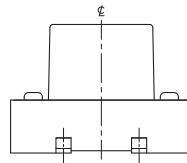
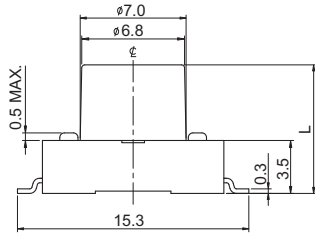
Optional: Tape and reel packaging with 330mm diameter reel, 24mm wide plastic tape - for surface mount gull-wing terminal

## CTS SERIES 224AM... - Surface Mount Gull Wing, Without Boss



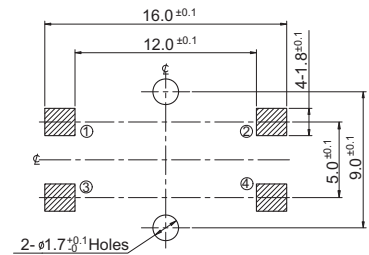
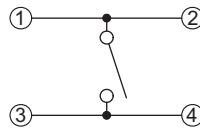
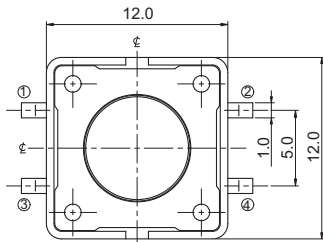
CIRCUIT DIAGRAM

PCB LAYOUT



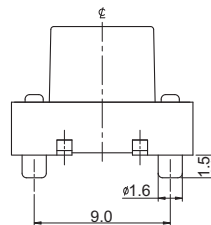
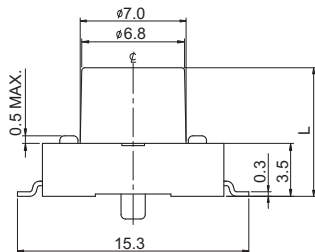
DIMENSION : mm  
STANDARD TOLERANCE :  
.X (1 PLACE) :  $\pm 0.30$

## CTS SERIES 224AM...B - Surface Mount Gull Wing, With Boss



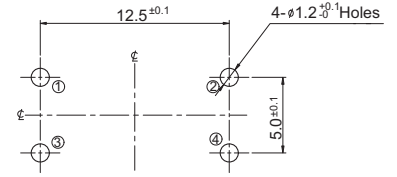
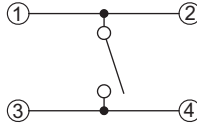
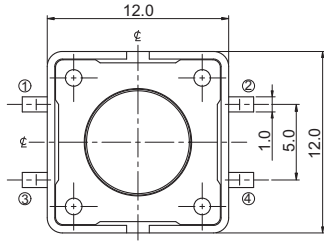
CIRCUIT DIAGRAM

PCB LAYOUT



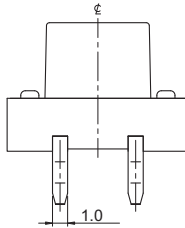
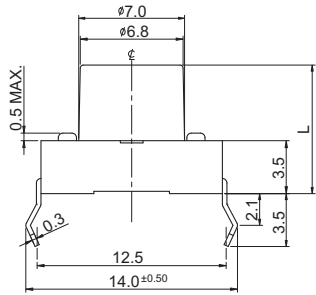
DIMENSION : mm  
STANDARD TOLERANCE :  
.X (1 PLACE) :  $\pm 0.30$

## CTS SERIES 224AD... - Standard Through Hole, Without Boss



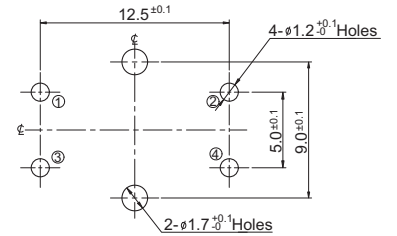
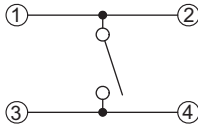
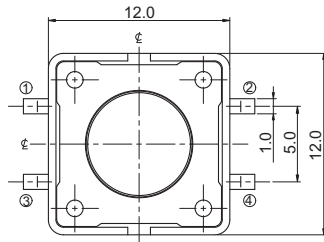
CIRCUIT DIAGRAM

PCB LAYOUT



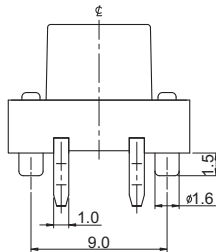
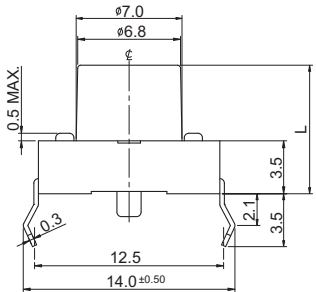
DIMENSION : mm  
STANDARD TOLERANCE :  
.X (1 PLACE) : ±0.30

## CTS SERIES 224AD...B - Standard Through Hole, With Boss



CIRCUIT DIAGRAM

PCB LAYOUT



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

## Ordering Information

