

# Tactile Switches

## 12 x 12 mm Washable Halogen-Free Tactile Switches

## TP57 Series

### General Specifications

#### MECHANICAL

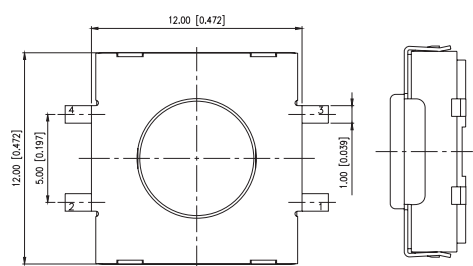
- » Stroke : 0.35±0.1 mm
- » Operating Temperature Range: -40°C to +80 °C
- » Storage Temperature Range: -40°C to +85°C

#### ELECTRICAL

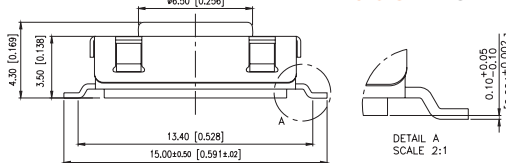
- » Rating: 50mA, 24VDC
- » Contact Resistance: 100mΩ Max
- » Insulation Resistance: 100MΩ Min. at 250 VDC
- » Dielectric Strength: 250VAC / 1 minute
- » Contact Arrangement: 1P1T
- » Electrical Life: 1,000,000 cycles min.

#### MATERIALS

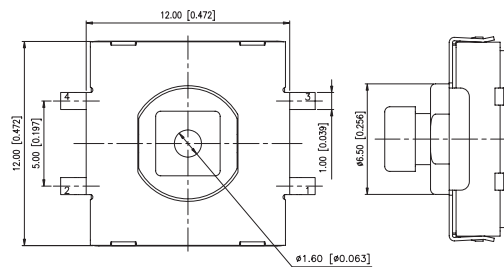
- » Cover: Stainless Steel
- » Stem: UL94V-0 High-Temp. Thermoplastic
- » Base: UL 94V-0 High Temp Thermoplastic black
- » Contact: Stainless Steel
- » Terminal: Brass with silver plated
- » Sealed Gasket: Silicone black min.
- » Halogen-Free Materials:
  - Br < 900 ppm
  - Cl < 900 ppm
  - Br+Cl < 1500 ppm
- » IP67 ▲



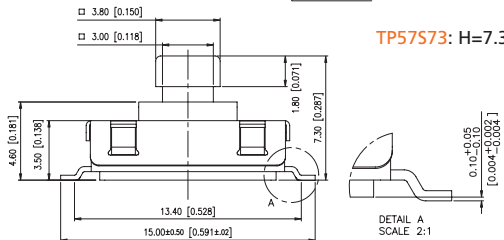
TP57S43: H=4.3



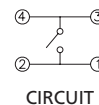
DETAIL A SCALE: 2:1



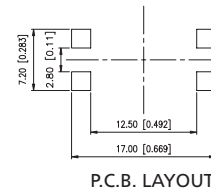
TP57S73: H=7.3



DETAIL A SCALE: 2:1



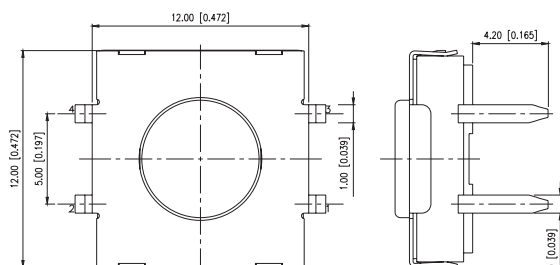
CIRCUIT



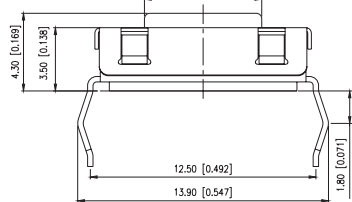
P.C.B. LAYOUT

General Tolerance: ±0.2mm

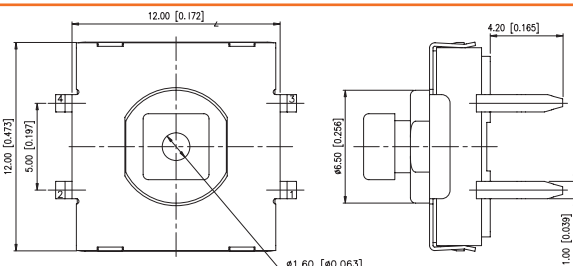
### TP57S SMT Terminals



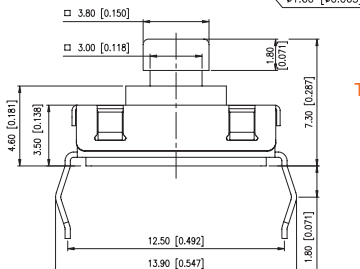
TP57H43: H=4.3



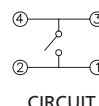
TP57H43: H=4.3



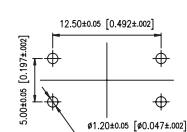
TP57H73: H=7.3



TP57H73: H=7.3



CIRCUIT



P.C.B. LAYOUT

General Tolerance: ±0.2mm

### TP57H THT Terminals

▲ Revised 2010-10-14

### How to order

TP57 1 2 3 4 + 5 6

#### 1 TERMINAL TYPE:

- H THT Terminals
- S SMT Terminals

#### 2 HEIGHT:

- 43 4.3mm
- 73 7.3mm (square actuator for optional cap)

#### 3 STEM COLOR & OPERATING FORCE: ▲

- K Brown & 160±50gf
- C Red & 260±50gf
- J White & 320±80gf ▲
- E Yellow & 520±130gf

#### 4 PACKAGING:

- BK Bulk (TP57H... only)
- TR Tape & Reel
- TB Tube

#### Optional:

#### 5 CAP TYPE (Only for Square Stems):

- K12S Square Caps
- K12R Round Caps

#### 6 COLOR OF CAPS:

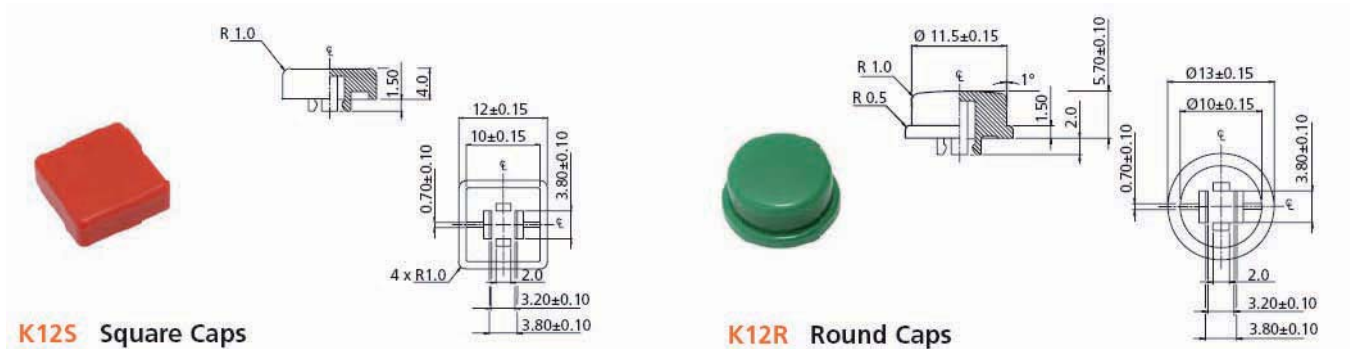
- A Black
- B Ivory
- C Red
- E Yellow
- F Green
- G Blue
- H Gray
- S Salmon

# Tactile Switches

12 x 12 mm Washable Halogen-Free Tactile Switches

TP57 Series

## OPTIONAL CAPS



**K12S** Square Caps

**K12R** Round Caps

## SOLDERING PROCESS

- » Wave Soldering : Recommended solder temperature at 500F° (260°C) max. 5 seconds subject to PCB 1.6mm thickness (soldering for through hole type).
- » Hand Soldering : Use a soldering iron of 30 watts, controlled at 350 approximately 5 seconds while applying solder.
- » Reflow Soldering : When applying reflow soldering, the peak temperature or the reflow oven should be set to 260°C max.

» Temperature Profile :

