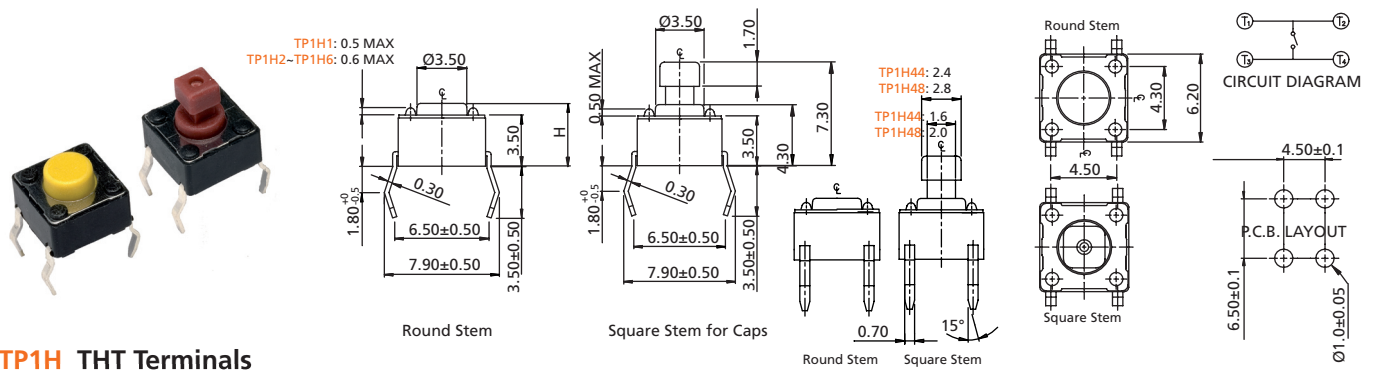


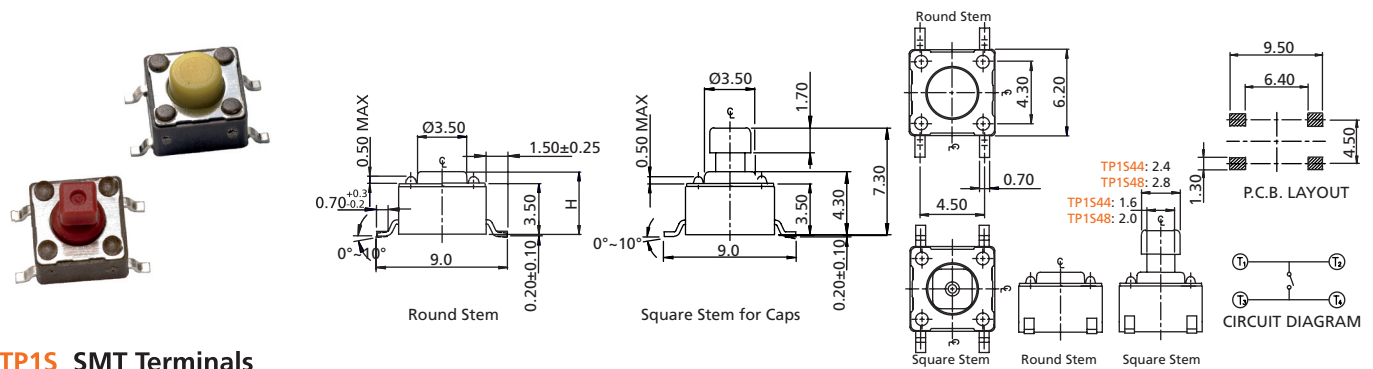
# Tactile Switches

## Standard 6 x 6 mm Tactile Switches

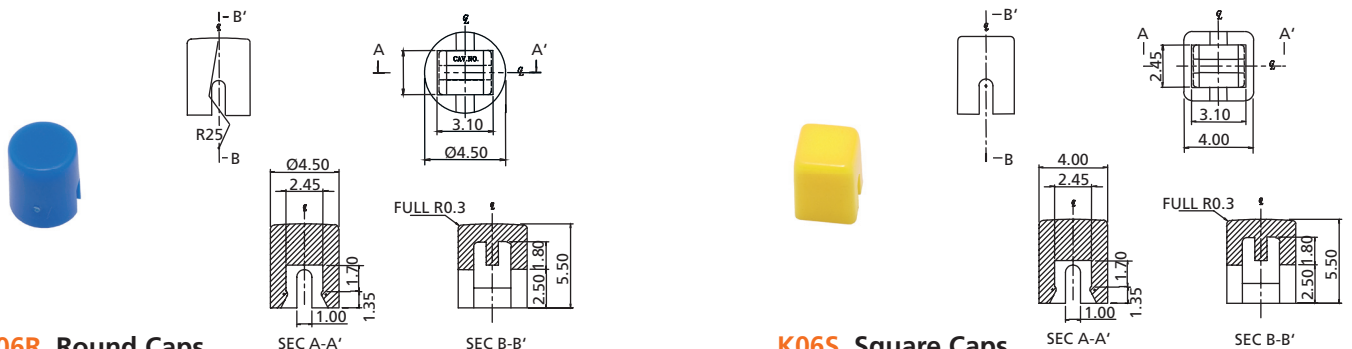
## TP1 Series



### TP1H THT Terminals



### TP1S SMT Terminals



### K06R Round Caps

### K06S Square Caps

## How to order:

TP1     +   (Caps)

### 1 TYPE OF TERMINALS:

H THT  
S SMT

### 2 Dimension H:

1 H=4.3mm (Round Stem)  
2 H=5.0mm (Round Stem)  
3 H=7.0mm (Round Stem)  
44 H=7.3mm (Square Stem 2.4mm)  
48 H=7.3mm (Square Stem 2.8mm)  
5 H=9.5mm (Round Stem)  
6 H=13.0mm (Round Stem)

### 3 STEM COLOR & OPERATING FORCE:

A Black & 100±50gf  
AK Black & 160±50gf  
K Brown & 160±50gf  
C Red & 260±50gf  
J Salmon & 320±80gf  
E Yellow & 520±130gf

### 4 PACKAGE STYLE:

BK Bulk Pack  
TB Tube (TP1S, TP1H1 & TP1H2 only)  
TR Tape & Reel (TP1S only, except TP1S6)

### Optional:

5 **CAP TYPE (Only for Square Stems):**  
K06S Square Caps  
K06R Round Caps

### 6 COLOR OF CAPS:

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

## General Specifications:

### MATERIALS

- » Contact Disc: Phosphor Bronze with silver cladding
- » Terminal: Brass with silver plated

### MECHANICAL

- » Stroke: 0.25 (+0.2/-0.1) mm
- » Operation Temperature: -25°C to +70°C
- » Storage Temperature: -30°C to +80°C

### ELECTRICAL

- » Electrical Life: 300,000 cycles for 320gf, 520gf  
500,000 cycles for 260gf  
1,000,000 cycles for 100gf, 160gf
- » Rating: 50mA, 12VDC
- » Contact Arrangement: 1 pole 1 throw

### LEADFREE SOLDERING PROCESSES

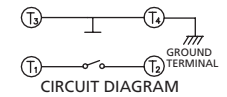
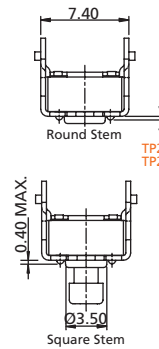
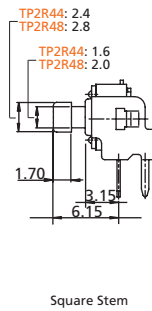
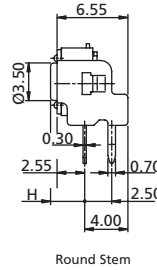
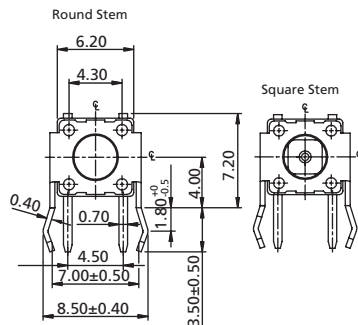
- » Wave Soldering: Recommended solder temperature at 260°C max. 5 seconds subject to PCB 1.6mm thickness (for THT).
- » Reflow Soldering: When applying reflow soldering, the peak temperature or the reflow oven should be set to 260°C max. 10 seconds max. (for SMT).

General Tolerance: ± 0.2 mm

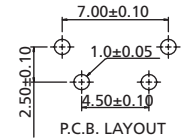
# Tactile Switches

## 6 x 6 mm THT Tactile Switches with Ground Terminal

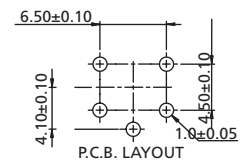
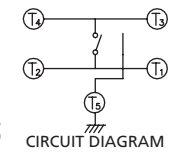
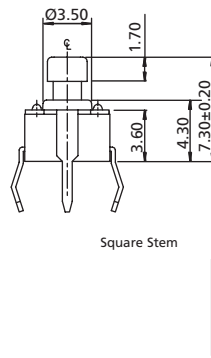
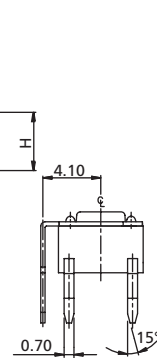
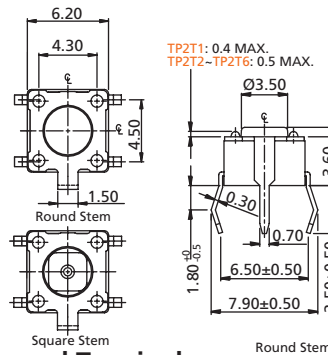
## TP2 Series



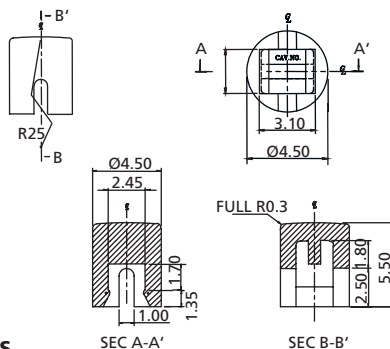
TP2R1: 0.3 MAX.  
TP2R2-TP2R6: 0.4 MAX.



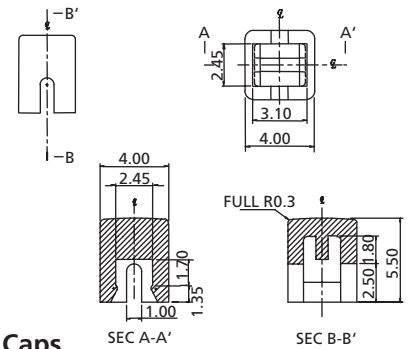
**TP2R** Right Angle Type with Ground Terminal



**TP2T** Top Type with Ground Terminal



**K06R** Round Caps



**K06S** Square Caps

### How to order:

TP2       +   (Caps)

**1** TYPE OF TACTILE SWITCH:  
R Right Angle Type with Ground Terminal  
T Top Type with Ground Terminal

**2** DIMENSION H FOR TP2R:  
1 H=3.15mm (Round Stem)  
2 H=3.85mm (Round Stem)  
3 H=5.85mm (Round Stem)  
44 H=6.15mm (Square Stem 2.4mm)  
48 H=6.15mm (Square Stem 2.8mm)  
5 H=8.35mm (Round Stem)  
6 H=11.85mm (Round Stem)

**3** DIMENSION H FOR TP2T:  
1 H=4.3mm (Round Stem)  
2 H=5.0mm (Round Stem)  
3 H=7.0mm (Round Stem)  
44 H=7.3mm (Square Stem 2.4mm)  
48 H=7.3mm (Square Stem 2.8mm)  
5 H=9.5mm (Round Stem)  
6 H=13.0mm (Round Stem)

**5** STEM COLOR & OPERATING FORCE:  
A Black & 100±50gf  
K Brown & 160±50gf  
C Red & 260±50gf  
J Salmon & 320±80gf  
E Yellow & 520±130gf

**4** PACKAGE STYLE:  
BK Bulk Pack

Optional:

**5** CAP TYPE  
(Only for Square Stems):  
K06S Square Caps  
K06R Round Caps

**6** COLOR OF CAPS:  
A Black  
B Ivory  
C Red  
E Yellow  
F Green  
G Blue  
H Gray  
S Salmon

### General Specifications:

#### MATERIALS

- » Contact Disc: Stainless steel
- » Terminal: Brass with silver plated

#### MECHANICAL

- » Stroke: 0.25 (+0.2/-0.1) mm
- » Operation Temperature: -25°C to +70°C
- » Storage Temperature: -30°C to +80°C

#### ELECTRICAL

- » Electrical Life: 300,000 cycles for 320gf, 520gf  
500,000 cycles for 260gf  
1,000,000 cycles for 100gf, 160gf
- » Rating: 50mA, 12VDC
- » Contact Arrangement: 1 pole 1 throw

#### LEADFREE SOLDERING PROCESSES

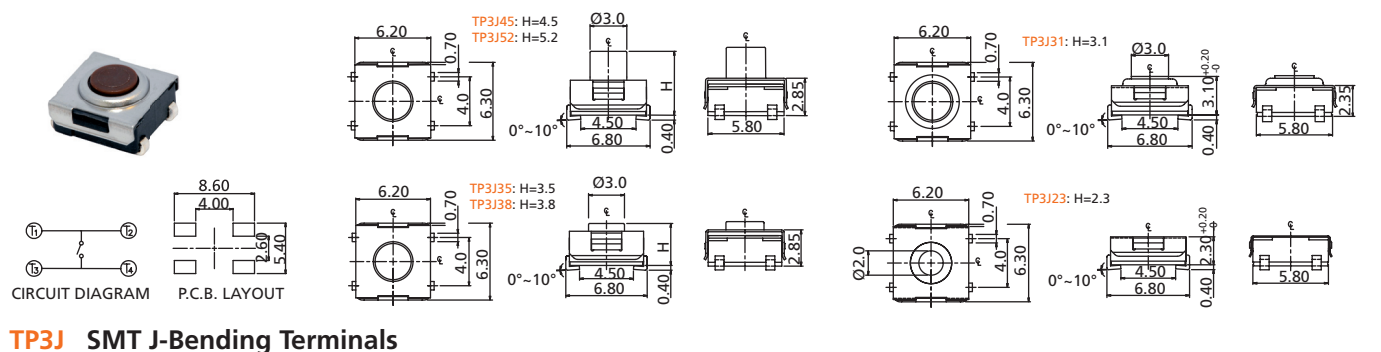
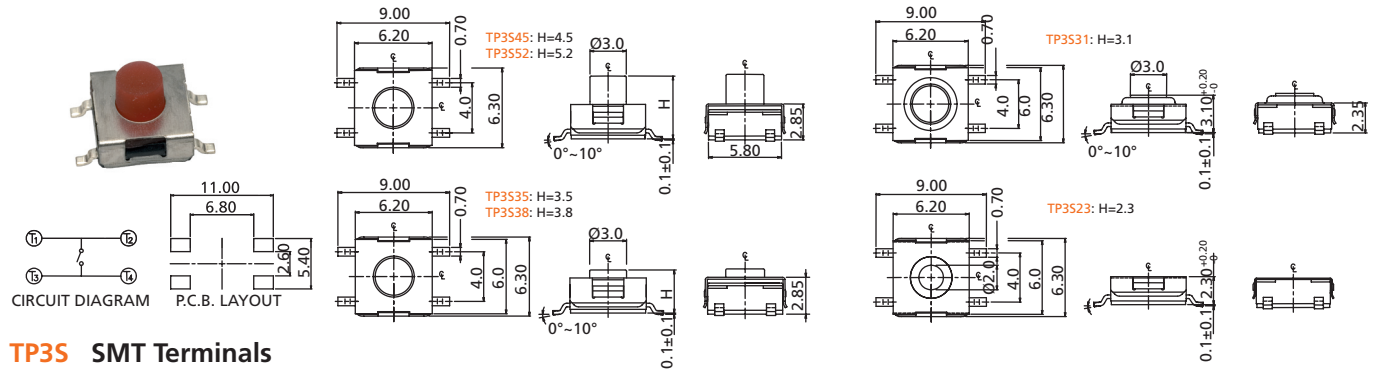
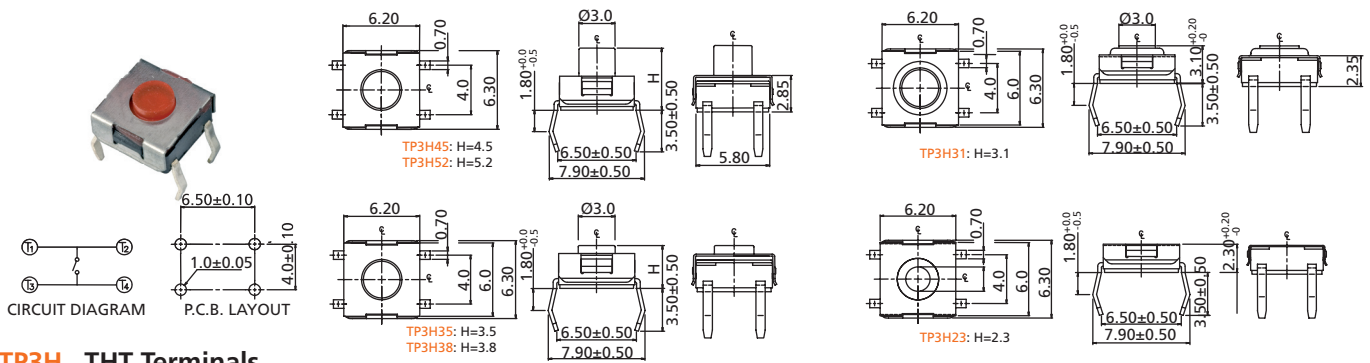
- » Wave Soldering: Recommended solder temperature at 260°C max. 5 seconds subject to PCB 1.6mm thickness.

General Tolerance: ± 0.2 mm

# Tactile Switches

## 6 x 6 mm Washable Tactile Switches

## TP3 Series



### How to order:

TP3 1 2 3 4

#### 1 TYPE OF TERMINALS:

- H THT
- S SMT
- J SMT J-Bending

#### 2 Dimension H:

- 23 H=2.3mm
- 31 H=3.1mm
- 35 H=3.5mm
- 38 H=3.8mm
- 45 H=4.5mm
- 52 H=5.2mm

#### 3 STEM COLOR & OPERATING FORCE:

- K Brown & 160±50gf (Only for H=3.1mm)
- Brown & 180±50gf (Only for H=3.5 / 3.8 / 4.5 / 5.2mm)
- U Silver & 160±50gf (Only for H=2.3mm)
- C Red & 260±70gf (Only for H=3.5 / 3.8 / 4.5 / 5.2mm)
- J Transparent & 360±90gf (Only for H=3.5 / 3.8 / 5.2mm)

#### 4 PACKAGE:

- BK Bulk (TP3J Only)
- TB Tube
- TR Tape & Reel

### General Specifications:

#### FEATURES

- » Sharp click feel with a positive tactile feedback
- » Seal characteristics:
  - The washable type switches allow submersed washing after soldering.
  - Proceed the cleaning process after the S/W temperature decreases to normal.
  - Degree of protection: IP46

#### MATERIALS

- » Terminal: Brass with silver plated
- » Contact: Stainless steel

#### MECHANICAL

- » Operation Temperature: -25°C to +70°C
- » Storage Temperature: -30°C to +80°C

#### ELECTRICAL

- » Electrical Life: 500,000 cycles for TP3\_38, 35K(C)J, 45K(C) & 52B(C)J
- 100,000 cycles for TP3\_31K, 23U & TP4S31KG
- » Rating: 50mA, 12VDC
- » Contact Arrangement: 1 pole 1 throw

#### LEADFREE SOLDERING PROCESSES

- » 260°C max. 5 seconds for THT terminals
- » 260°C max. 10 seconds for SMT terminals

General Tolerance: ± 0.2 mm