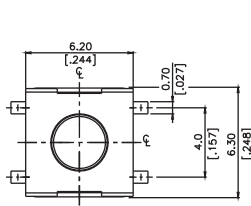


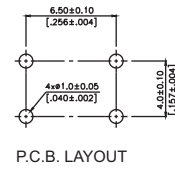
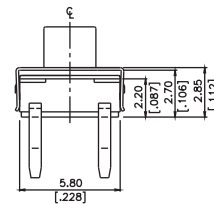
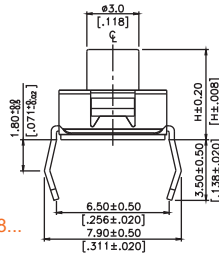
# Tactile Switches

## 6 x 6 mm Washable Tactile Switch

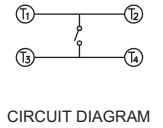
## TP3 Series



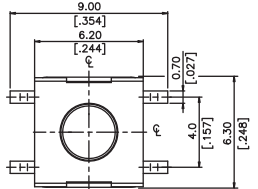
TP3H45..., TP3H35..., TP3H52..., TP3H38...  
PC Terminals



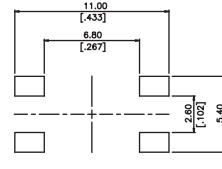
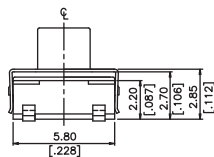
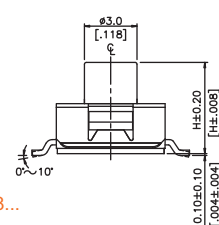
P.C.B. LAYOUT



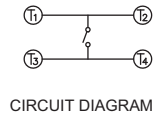
CIRCUIT DIAGRAM



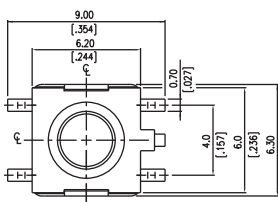
TP3S45..., TP3S35..., TP3S52..., TP3S38...  
SMT Terminals



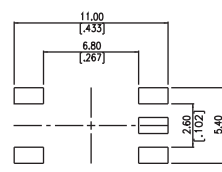
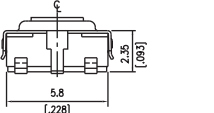
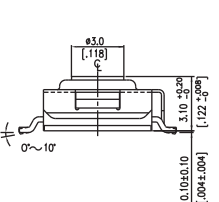
P.C.B. LAYOUT



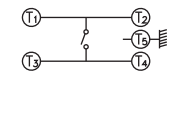
CIRCUIT DIAGRAM



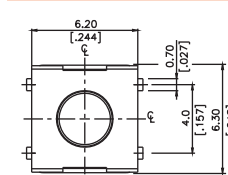
TP3SG31... SMT Terminals with Ground Terminal



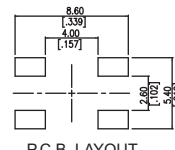
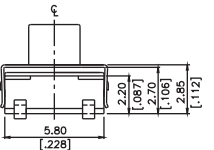
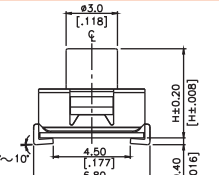
P.C.B. LAYOUT



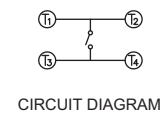
CIRCUIT DIAGRAM



TP3J45..., TP3J35..., TP3J52..., TP3J38... SMT J-Bending Terminals



P.C.B. LAYOUT



CIRCUIT DIAGRAM

### SPECIFICATIONS:

- > Rating: 50mA 12VDC
- > Contact Resistance: 100 mohm Max.
- > Insulation Resistance: 100 Mohm Min. at 500VDC
- > Dielectric Strength: 250VAC 1 Minute
- > Electrical Life: 100,000 Cycles Min. (for Height 2.3mm, 3.1mm)  
500,000 Cycles Min. (for other Heights)
- > Stop Strength: 3kgf Max. vertical static 15 Seconds
- > Stroke: 0.25+0.20/-0.10 mm (for 23U, 31K, 31C, 73)  
0.45±0.20 mm (for 38/52/K/C, 35/45/K/C/J)  
0.60±0.20 mm (for 38J, 52J)
- > Operating Temperature: -40°C ~ +85°C
- > Protection Degree: IP67

### MATERIALS:

- > Stem: High Temp Thermoplastic Nylon UL94V-0 or Silicone Rubber or Brass with Nickel plated
- > Adhesive Tape: Teflon or Kapton
- > Filler: Nylon
- > Contact: Stainless Steel
- > Cover: Stainless Steel or Nickel Silver (only TP3SG...)
- > Base: High-Temp. Thermoplastic UL94V-0 black

### SOLDERING CONDITIONS:

- > Hand Soldering (PC Terminals): 30W, 350°C 5 Seconds
- > Wave Soldering (SMT Terminals): 260°C 5 Seconds Max.
- > Reflow Soldering (SMT Terminals): 260°C 5~10 Sec. Max.

### HOW TO ORDER:

UNIT: mm [inch]

Tolerance unless otherwise stated: ±0.2mm

TP3

1	2	3	4	5

#### 1 TERMINALS:

- H PC Terminals (THT)
- S SMT
- SG SMT with Ground Terminal
- J SMT J-Bending

#### 2 TOTAL HEIGHT "H":

- 45 4.5mm (only for 180/260gf)
- 35 3.5mm (only for 180/260/360gf)
- 31 3.1mm (only for 160/260gf)
- 52 5.2mm (only for 180/260/360gf)
- 73 7.3mm (only for 180/360gf, not for SMT J-Bending)
- 77 7.7mm (only for 160/360gf and SMT J-Bending)
- 23 2.3mm (only for 160gf silver)
- 38 3.8mm (only for 180/260/360gf)

#### 3

- K
- U
- C
- J

#### STEM COLOR & OPERATING FORCE:

- Brown, 160±50gf (only for height 3.1mm)
- Brown, 180±50gf (only for height 3.8mm, 5.2mm, 3.5mm, 4.5mm, 7.3/7.7mm)
- Silver 160±50gf (only for height 2.3mm)
- Red, 260±70gf (only for height 3.8mm, 5.2mm, 3.1mm, 3.5mm, 4.5mm)
- Transparent, 360±90gf (only for height 3.8mm, 5.2mm, 3.5mm, 7.3/7.7mm)

#### 4

- No Code
- H

#### MATERIAL:

- RoHS compliant (Standard)
- RoHS compliant and Halogen-Free

#### 5

- BK
- TB
- TR

#### PACKAGING:

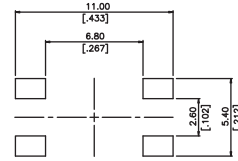
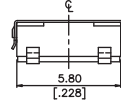
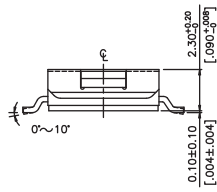
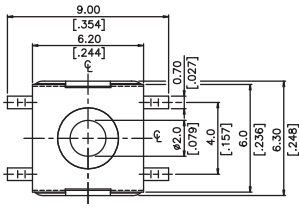
- Bulk
- Tube
- Tape & Reel (only for SMT)



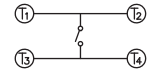
# Tactile Switches

## 6 x 6 mm Washable Tactile Switch

## TP3 Series

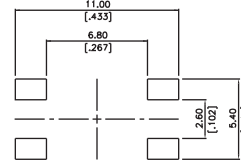
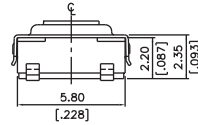
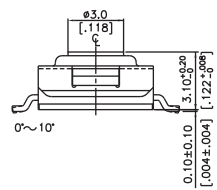
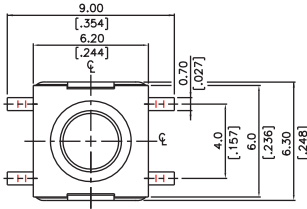


P.C.B. LAYOUT

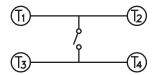


CIRCUIT DIAGRAM

TP3S23...

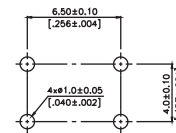
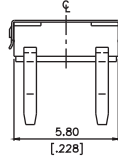
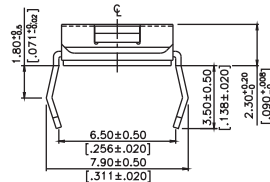
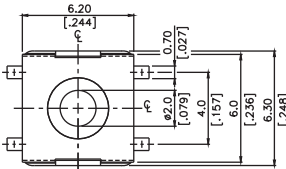


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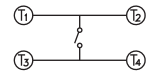


CIRCUIT DIAGRAM

TP3S31...

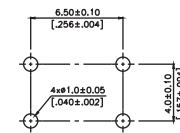
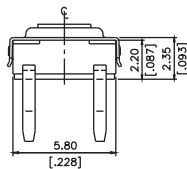
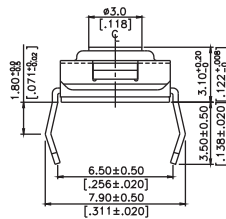
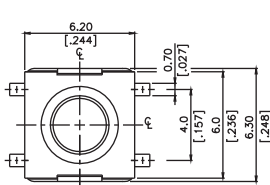


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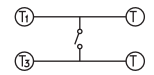


CIRCUIT DIAGRAM

TP3H23...

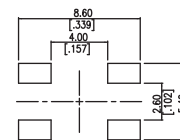
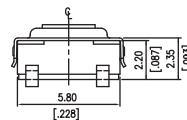
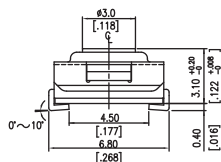
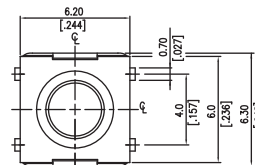


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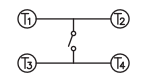


CIRCUIT DIAGRAM

TP3H31...

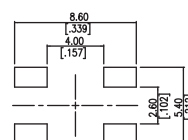
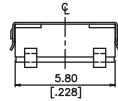
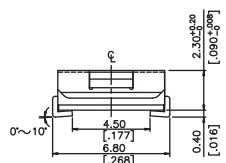
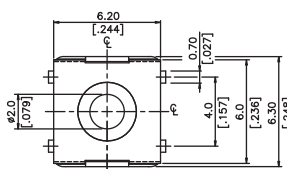


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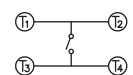


CIRCUIT DIAGRAM

TP3J31...



P.C.B. LAYOUT



CIRCUIT DIAGRAM

TP3J23...