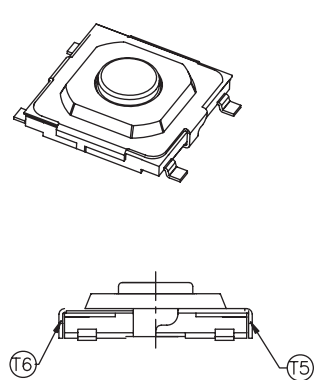


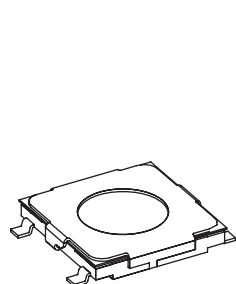
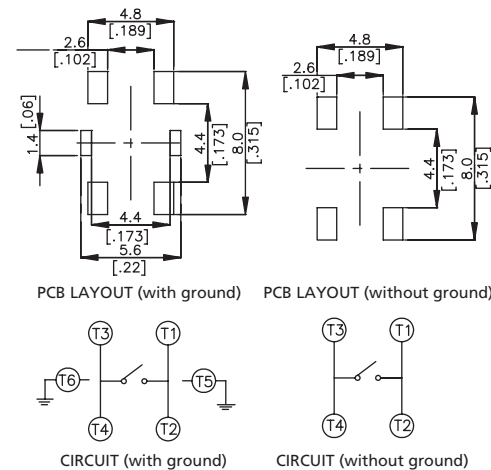
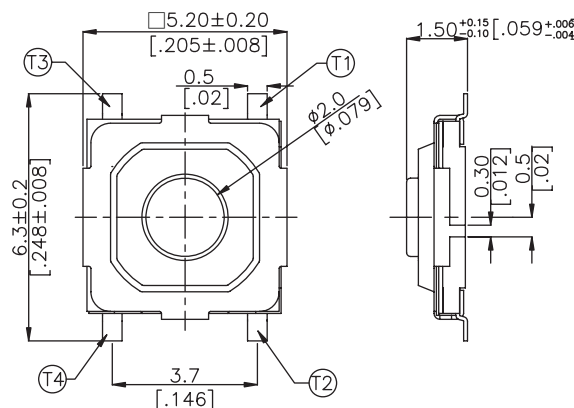
# Tactile Switches

## 5x5mm SMT Halogen-Free Tactile Switches

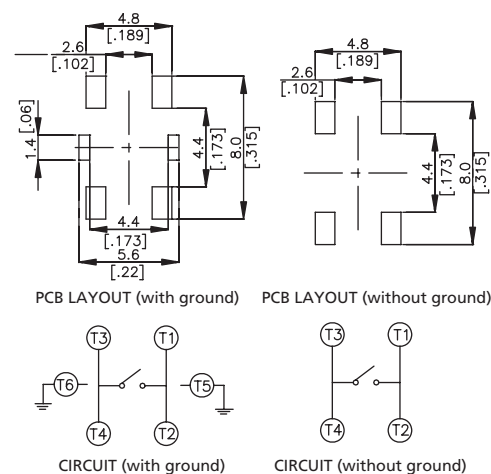
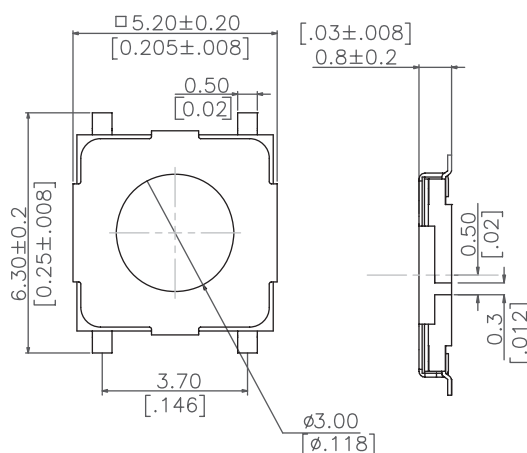
## TP89 Series



TP89SG...3...



TP89SG...2...



### How to order:

TP89 1 2 3 4 5 6 7

#### 1 TYPE OF TERMINALS:

- S Gull Wing SMT Terminals
- J J Bend SMT Terminals

#### 2 GROUND TERMINALS:

- G With Ground Terminals
- C With Ground Pin in Central

#### 3 MATERIAL OF COVER:

- N Nickel Silver (Standard)
- S Stainless Steel

#### 4 TOTAL HEIGHT:

- 2 0.8 mm
- 3 1.5 mm

#### 5 OPERATING FORCE:

- L 100gf ± 50gf
- S 160gf ± 50gf
- H 260gf ± 50gf

#### 6 STEM:

- N Metal Stem
- A Black Stem (only for 160gf)
- B White Stem (only for 100gf & 260gf)

#### 7 PACKAGING:

- TR Tape and Reel (4000 pcs per reel)

General Tolerance: ±0.2mm

### General Specifications:

#### MATERIALS

- » Halogen-free materials
- » Cover: Nickel Silver or stainless steel
- » Contact Disc: Stainless steel with silver cladding
- » Terminal: Brass with silver plated
- » Base: LCP High-temp Thermoplastic black
- » Plastic Stem: LCP High-temp Thermoplastic black
- » Tape: Teflon

#### MECHANICAL

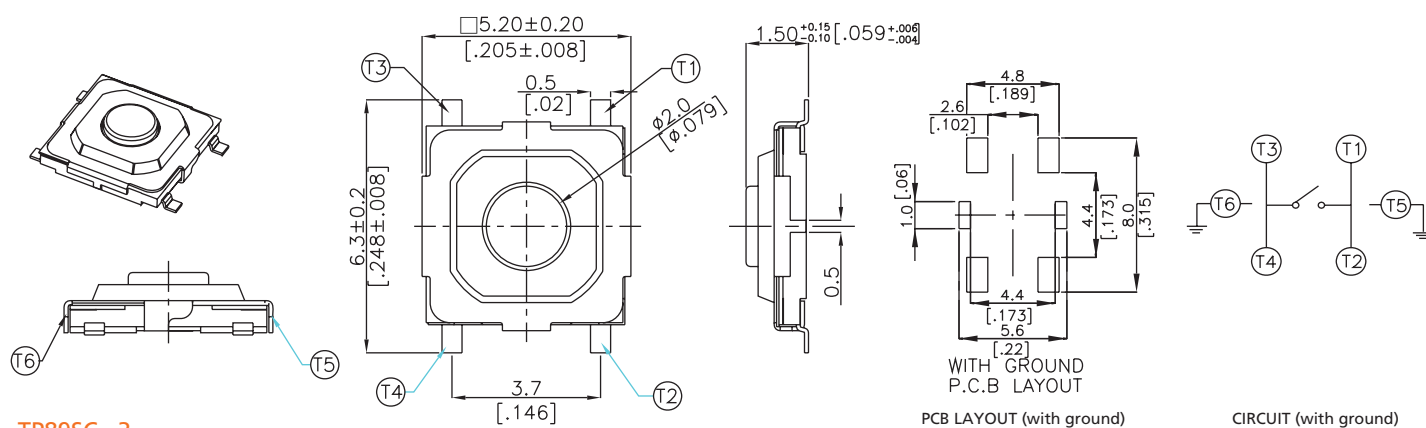
- » Stroke: 0.25<sup>+0.1mm</sup><sub>-0.2mm</sub>
- » Stop Strength: Max.3kgf vertical static load continuously for 15 seconds
- » Operation Temperature Range: -25°C to +70°C
- » Storage Temperature Range: -30°C to +80°C

#### ELECTRICAL

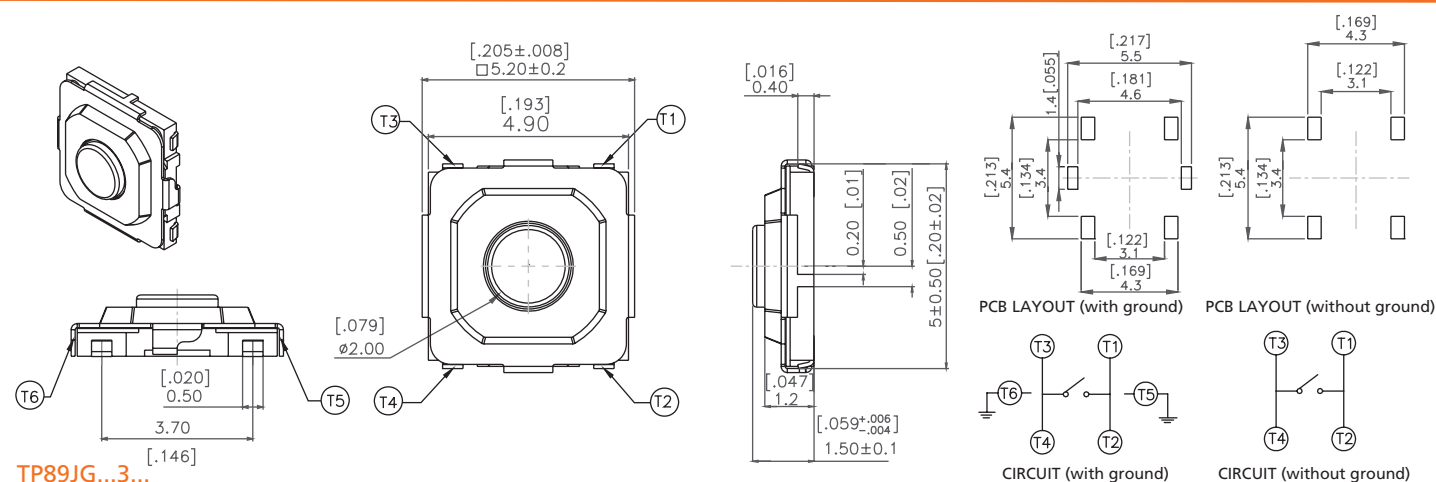
- » Electrical Life: 1,000,000 cycles min. for 100gf & 160gf  
200,000 cycles min. for 260gf
- » Rating: 50 mA, 12 VDC
- » Contact Resistance: 100mΩ max.
- » Insulation Resistance: 100mΩ min.at 500VDC
- » Dielectric Strength: 250VAC/ 1 minute
- » Contact Arrangement: 1 pole 1 throw

## 5x5mm SMT Halogen-Free Tactile Switches

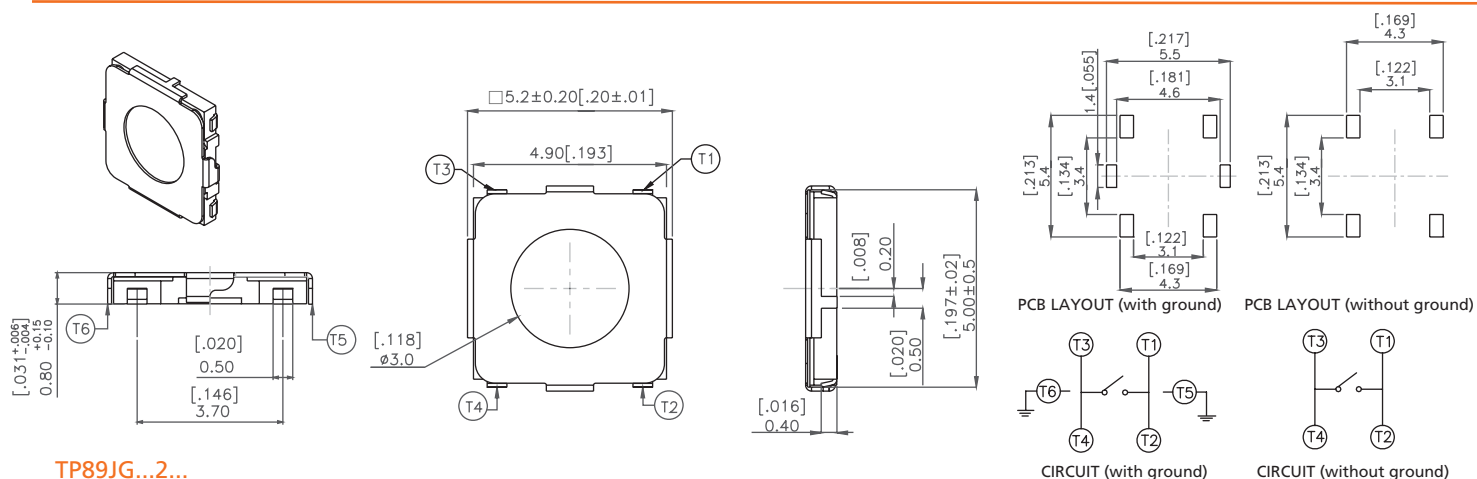
## TP89 Series



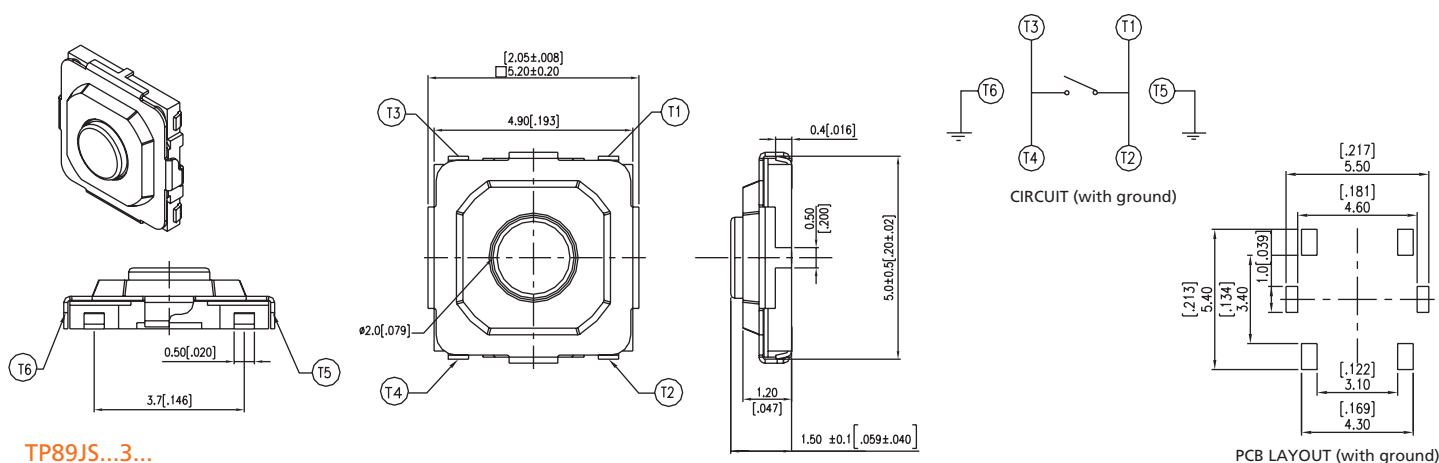
TP89SC...3...



TP89JG...3...



TP89JG...2...



TP89JS...3...

# Tactile Switches

## 5x5mm SMT Halogen-Free Tactile Switches

## TP89 Series

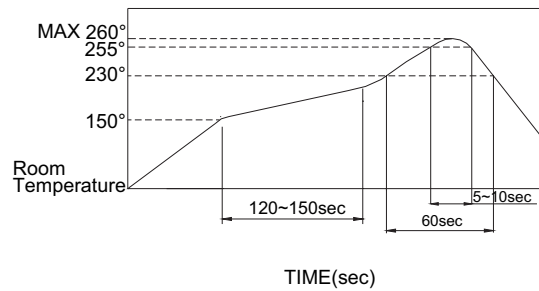
### SOLDERING PROCESS

#### > Hand Soldering:

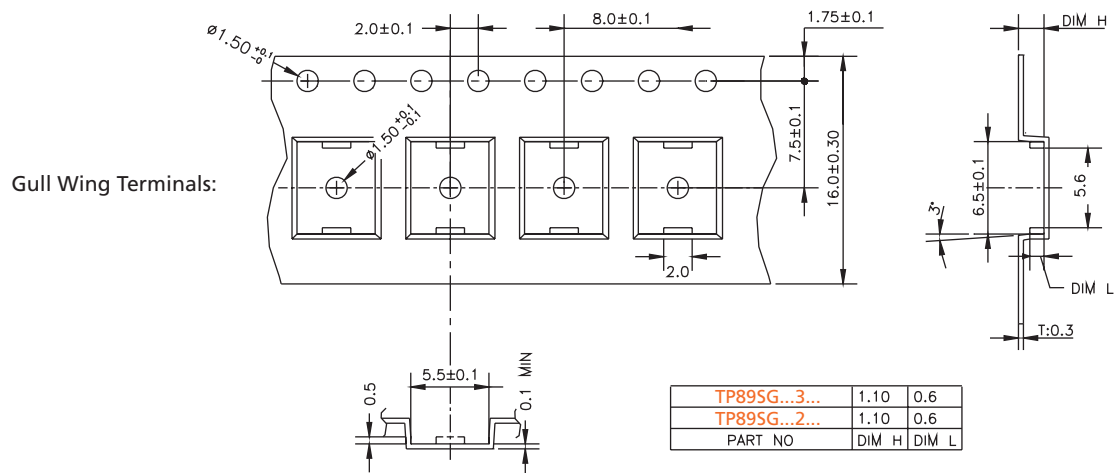
Use a soldering iron of 30 watts, controlled at 350°C approximately Max 5 seconds while applying solder.

#### > Vapor phase & reflow soldering:

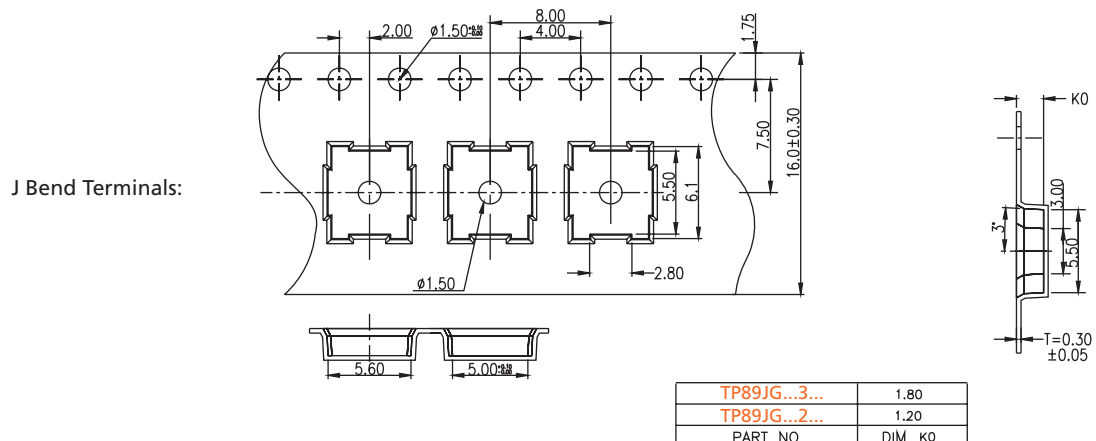
#### Temperature Profile:



### Tape & Reel Packaging:



General Tolerance : ±0.1mm



General Tolerance : ±0.1mm