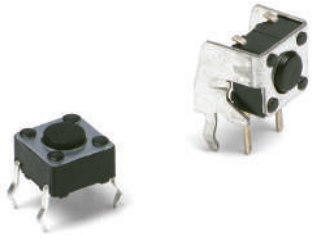
# PTS645 Series
# 6 mm Tact Switches



## Features/Benefits

- *Compact size 6 x 6 mm*
- *Variety of actuator lengths*
- *Choice of actuation force*
- *RoHS compliant and compatible*

## Typical Applications

- *Consumer products*
- *Instrumentation*
- *Computer products*
- *Industrial*



## Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: PC pins

## Mechanical

ACTUATION FORCE: 130 grams, 160 grams, 200 grams, 260 grams
LIFE EXPECTANCY: 100,000 operations.

## Electrical

CONTACT RATING: 50 mA @ 12 V DC.
DIELECTRIC STRENGTH: 250 V AC min.
CONTACT RESISTANCE: 100 mΩ max. initial.
INSULATION RESISTANCE: $10^{11}$ Ω min.

## Environmental

OPERATING TEMPERATURE: -20˚C to 60˚C

## Process

SOLDERING: Preheating to 100˚C for 45 sec. max. Keep flux flush with top surface of PCB; do not apply to component side of PCB and area where terminals are located. Soldering to 255˚C for 5 sec. max. Clean by brushing on solder surface. Do not clean switch with solvents.

## Packaging

Bulk packaging.

**Tape & reel for the SMT type:**
Reels of 1,000 pieces for 4,3 and 5,0 mm height
Reels of 700 pieces for 7,0 mm height
Reels of 500 pieces for 9,5 mm height
Reels of 400 pieces for 13,0 mm height

**NOTE**: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

## How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and and place it in the appropriate box.

P T S 6 4 5 [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] L F S

**Termination**
**S** Straight
**T** Straight with ESD pin
**V** Vertical

**Actuator Shape**
**NONE** Round actuator, All versions
**J** Square actuator, 2.4 mm side
THT versions only (No ESD pin - not available with Termination "T" style

**Actuation Force**
**L** 130 grams
**M** 160 grams
**H** 200 grams
**K** 260 grams

**Insertion Type**
**2** Thru hole
**SMTR92*** Surface mount, tape & reel

RoHS compliant and compatible.
Silver plated.

**Switch height from PCB for S and T only**
**(H dimension see actuator height drawings)**
**43** 4,3 (.169), thru-hole and SMT
**50** 5,0 (.197), thru-hole and SMT
**70** 7,0 (.275), thru-hole and SMT
**73** 7,3 (.287), thru-hole, square actuator 2.4 mm side only
**95** 9,5 (.374), thru-hole and SMT
**13** 13,0 (.512) SMT only

**Switch length from front leads for V only**
**(H dimension see actuator height drawings)**
**31** 3,15 (.124), vertical
**39** 3,85 (.151), vertical
**58** 5,85 (.230), vertical
**61** 6,15 (.242), vertical, square actuator 2.4 mm side only
**83** 8,35 (.329), vertical

*Only the straight type termination without ESD pin is available in SMT type.

*Dimensions are shown: mm*
*Specifications and dimensions subject to change*

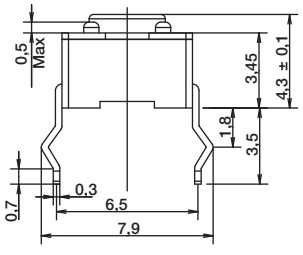
# PTS645 Series
# 6 mm Tact Switches



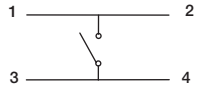
## TERMINATION

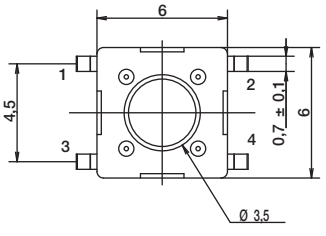
### S STRAIGHT

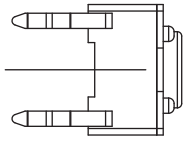




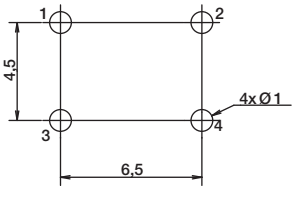

SCHEMATIC



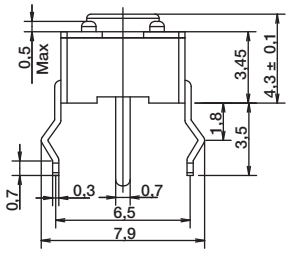



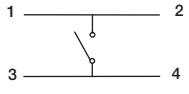
PCB LAYOUT

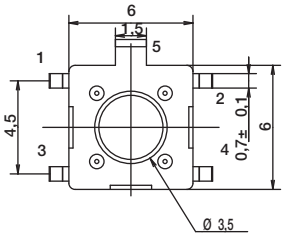


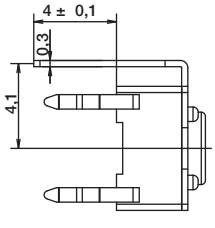

### T STRAIGHT WITH ESD PIN



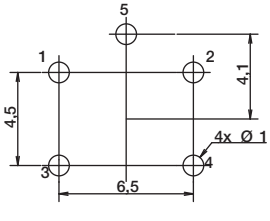

SCHEMATIC



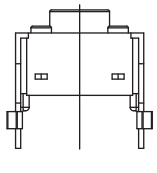




PCB LAYOUT

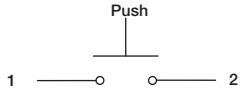


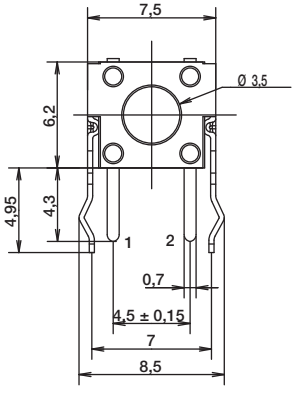

### V VERTICAL

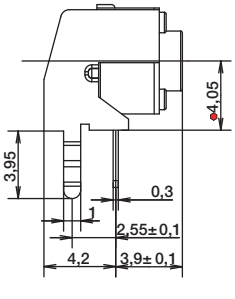


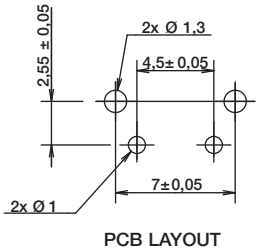


SCHEMATIC

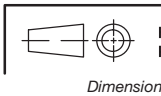



PCB LAYOUT



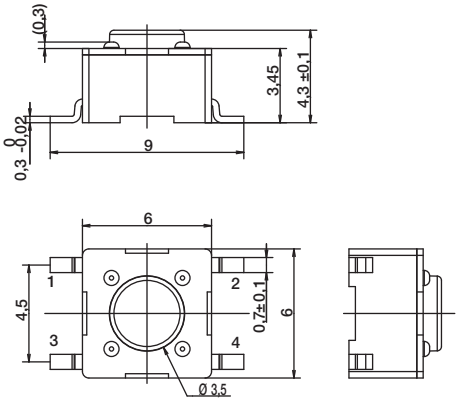

*Dimensions are shown: mm*
*Specifications and dimensions subject to change*

# PTS645 Series
# 6 mm Tact Switches

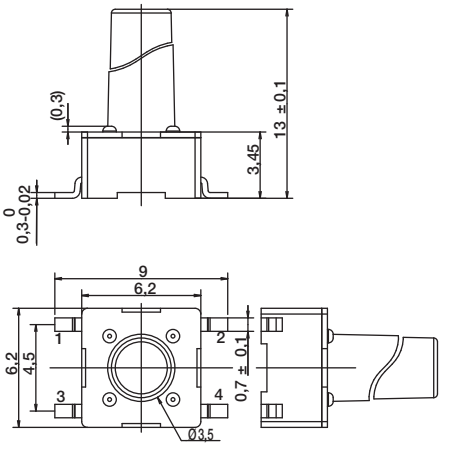
## TERMINATION

### SMT

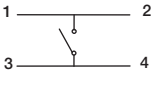
**FOR 4.3, 5.0, 7.0, 9.5 MM HEIGHT**

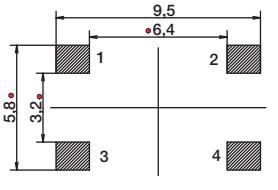



**13.0 MM HEIGHT ONLY**



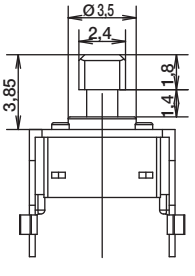

SCHEMATIC



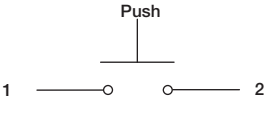



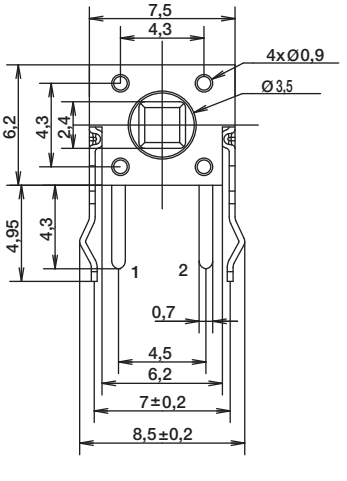

PCB LAYOUT

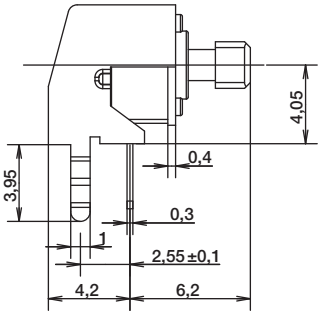
## ACTUATOR SHAPE

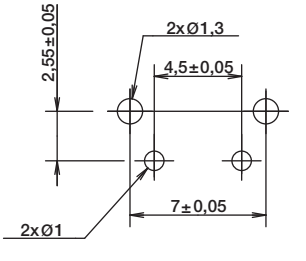



SCHEMATIC



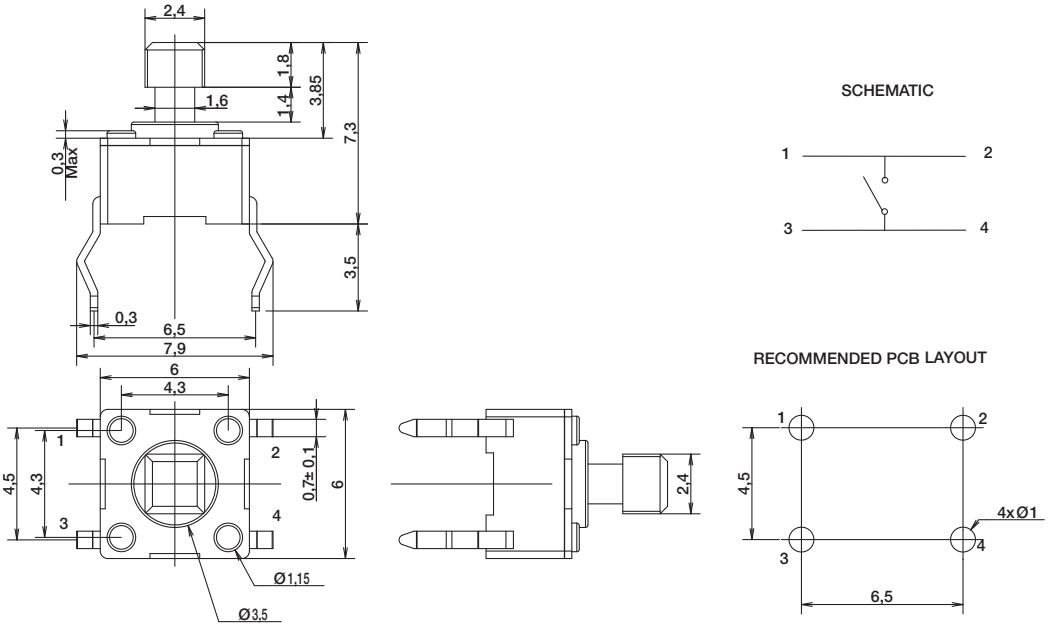




RECOMMENDED PCB LAYOUT

First Angle Projection

*Dimensions are shown: mm*
*Specifications and dimensions subject to change*

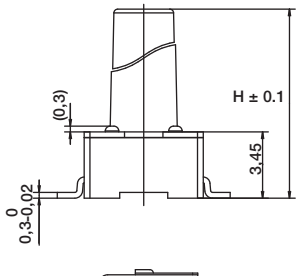
## ACTUATOR SHAPE




## ACTUATION FORCE

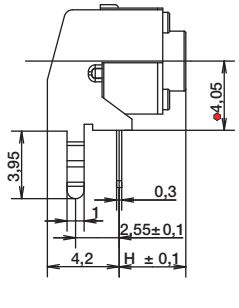
| OPTION CODE | FORCE |
|---|---|
| L | 130 grams Black |
| M | 160 grams Blue |
| H | 200 grams Gray |
| K | 260 grams Red |

## ACTUATOR HEIGHT




**Switch height from PCB for S and T only**

| OPTION CODE | DIMENSION H | TERMINATION | SCHEMATIC Without EMC pin | SCHEMATIC With EMC pin |
|---|---|---|---|---|
| 43 | 4,3 (.169) | Thru-hole and SMT | | |
| 50 | 5,0 (.197) | Thru-hole and SMT | | |
| 70 | 7,0 (.275) | Thru-hole and SMT | | |
| 95 | 9,5 (.374) | Thru-hole and SMT | | |
| 13 | 13,0 (.512) | SMT | | |

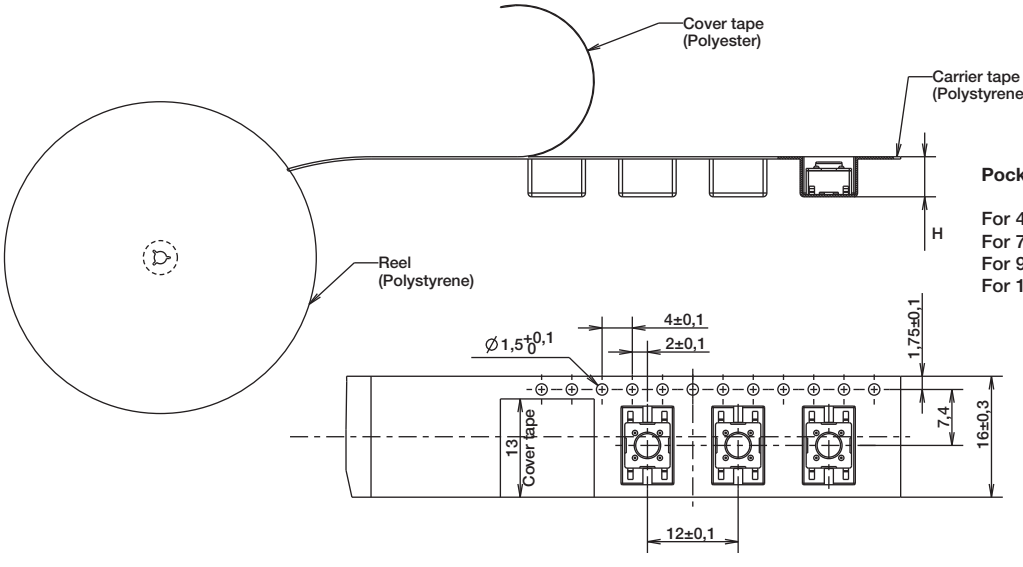



**Switch length from front leads for V only**

| OPTION CODE | DIMENSION H | TERMINATION | SCHEMATIC Without EMC pin | SCHEMATIC With EMC pin |
|---|---|---|---|---|
| 31 | 3,15 (.124) | Vertical | | |
| 39 | 3,85 (.151) | Vertical | | |
| 58 | 5,85 (.230) | Vertical | | |
| 83 | 8,35 (.329) | Vertical | | |

## TAPE & REEL






**Pocket Height**

For 4.3 and 5.0 mm: Height 5.3 mm
For 7.0 mm: Height 7.3 mm
For 9.5 mm: Height 10.3 mm
For 13.0 mm: Height 13.3 mm