



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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# 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

B

Tactile Switches

### 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<sup>11</sup> 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.

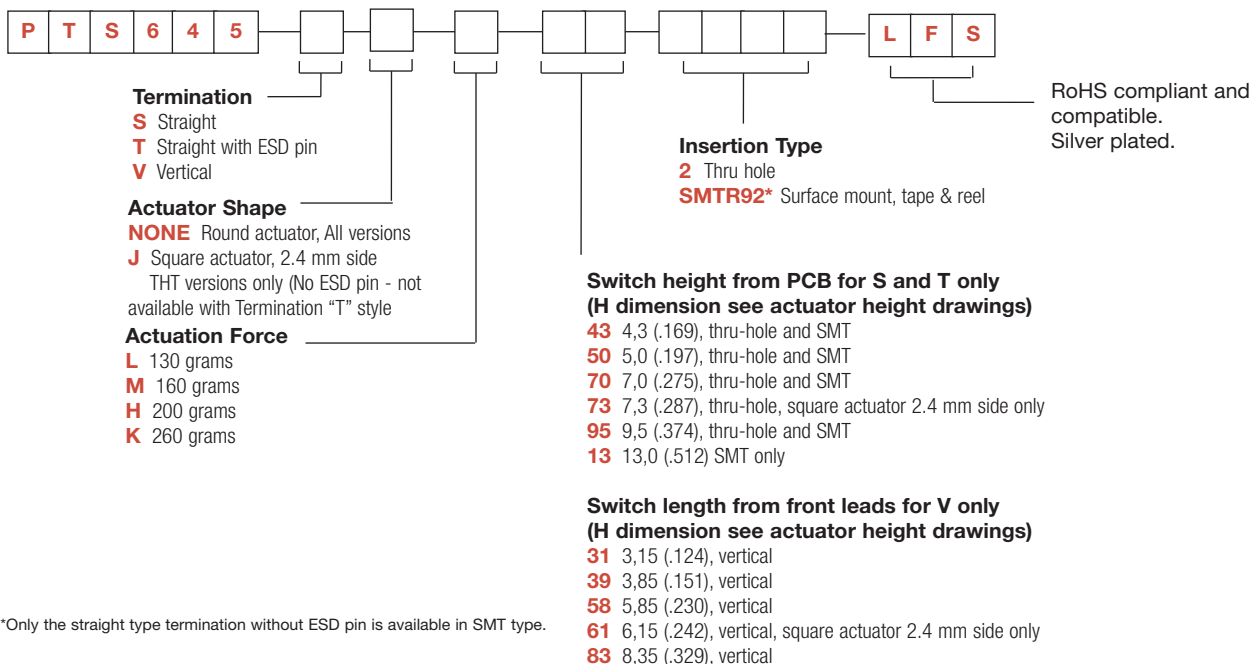
#### Tape & reel for the SMT type:

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 place it in the appropriate box.



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

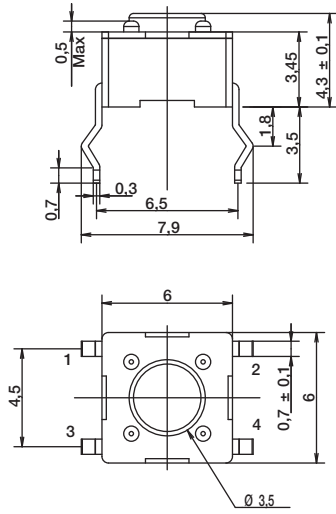


Dimensions are shown: mm  
Specifications and dimensions subject to change

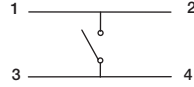
# PTS645 Series 6 mm Tact Switches

## TERMINATION

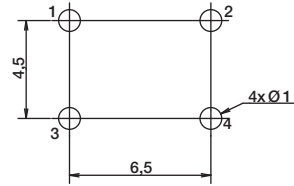
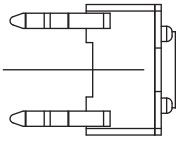
### S STRAIGHT



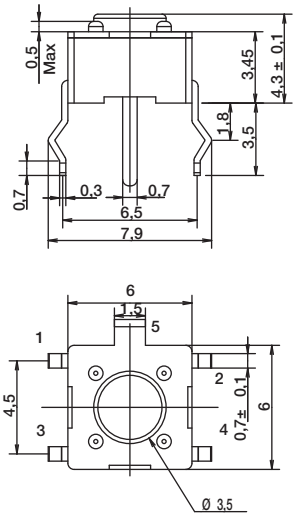
SCHEMATIC



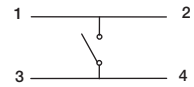
PCB LAYOUT



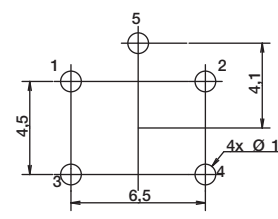
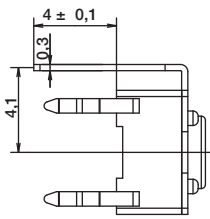
### T STRAIGHT WITH ESD PIN



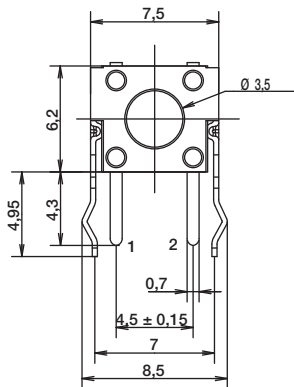
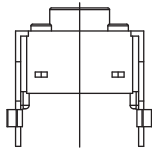
SCHEMATIC



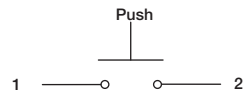
PCB LAYOUT



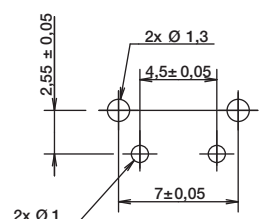
### V VERTICAL



SCHEMATIC



PCB LAYOUT



Dimensions are shown: mm  
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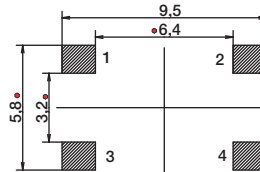
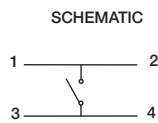
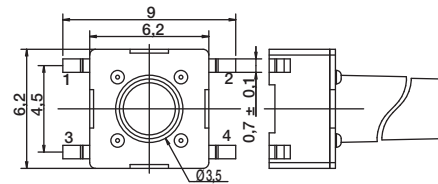
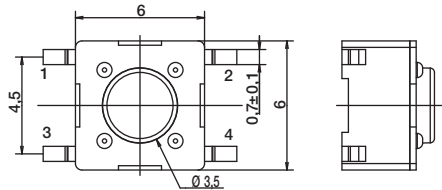
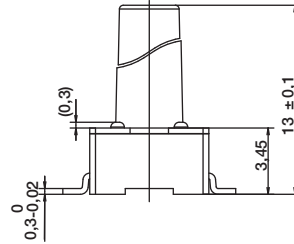
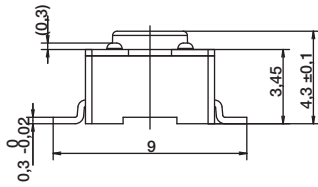
# PTS645 Series 6 mm Tact Switches

## TERMINATION

### SMT

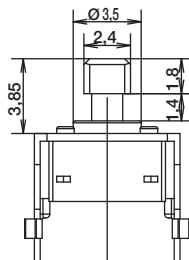
FOR 4.3, 5.0, 7.0, 9.5 MM HEIGHT

13.0 MM HEIGHT ONLY

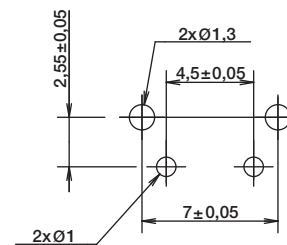
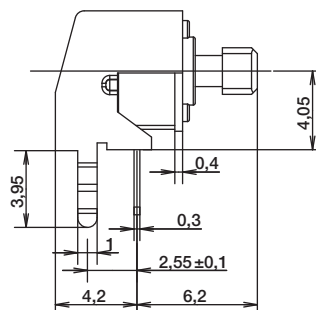
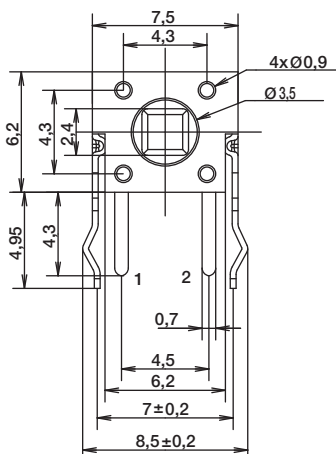
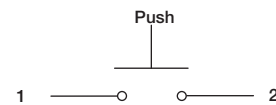


PCB LAYOUT

## ACTUATOR SHAPE



SCHEMATIC



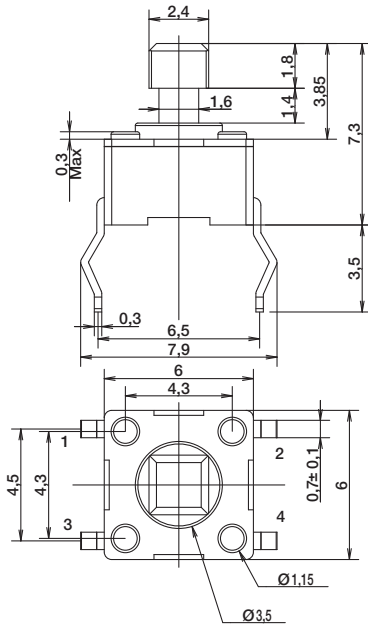
RECOMMENDED PCB LAYOUT



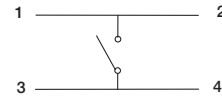
Dimensions are shown: mm  
Specifications and dimensions subject to change

# PTS645 Series 6 mm Tact Switches

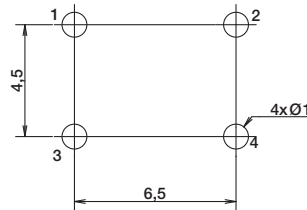
## ACTUATOR SHAPE



SCHEMATIC



RECOMMENDED PCB LAYOUT



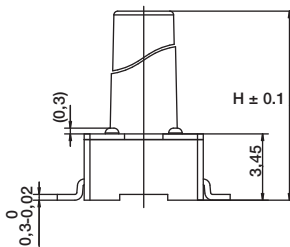
B

Tactile Switches

## ACTUATION FORCE

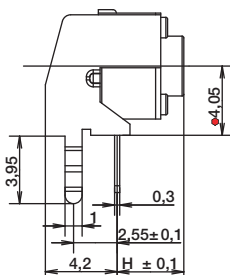
OPTION CODE	FORCE
<b>L</b>	130 grams Black
<b>M</b>	160 grams Blue
<b>H</b>	200 grams Gray
<b>K</b>	260 grams Red

## ACTUATOR HEIGHT



Switch height from PCB for S and T only

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



Switch length from front leads for V only

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



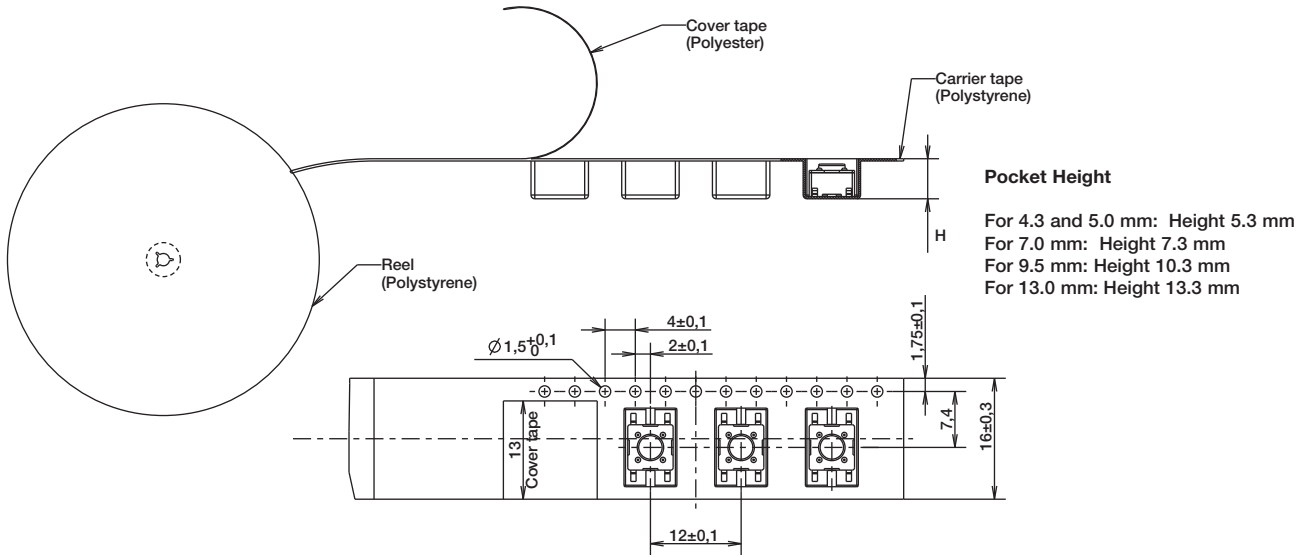
Dimensions are shown: mm  
Specifications and dimensions subject to change

# PTS645 Series 6 mm Tact Switches

## TAPE & REEL

B

Tactile Switches



Dimensions are shown: mm  
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