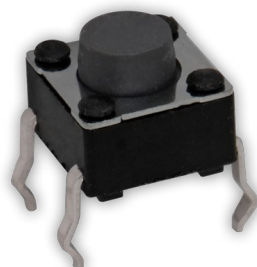


PTS645 Series

6 mm Tactile Switches



Specifications

Function	Momentary action
Contact Arrangement	SPST, N.O.
Terminals	PC pins

Mechanical Characteristics

Life Expectancy	100,000 operations
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Electrical Characteristics

Contact Rating	Max. 50mA@12VDC Min. 10 μ A@1VDC
Dielectric Strength	250 V AC min.
Contact Resistance	100 m Ω max. initial
Insulation Resistance	10 ¹¹ Ω min.

Environmental Characteristics

Operating Temperature	-40°C to 85°C
Storage Temperature	

Notes:

Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.
The PTS series is not certified for using in Automotive application and no PPAP. However, in the case of some automotive accessories and specific applications for 2 and 3 wheeled vehicles the PTS is widely used and very suitable. Please contact your local C&K representative to discuss your application and the best switch solution.

Description

The PTS645 switch series are 6mm tactile switches, designed to provide those designing for consumer product, instrumentation and computing equipment applications the long-lasting, responsive switch they need. PTS645 switches are compact (6 x 6mm) and are available in a variety of actuator lengths, with a choice of actuation force, allowing you to customize the switch to your product's needs.

Features & Benefits

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

Applications

- Consumer products
- Instrumentation
- Computer products
- Industrial

Process

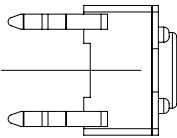
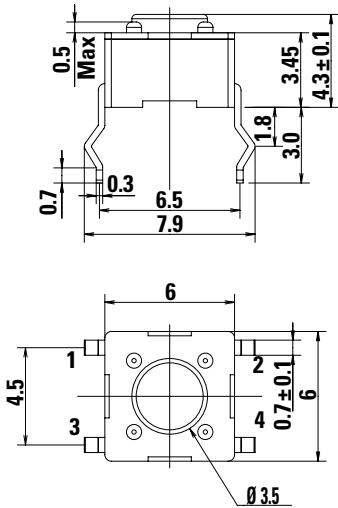
Soldering	Test 2 times Max.
	Reflow soldering conditions (Reference standard: J-STD-020)
	Preheat—150°C-200°C, 60-120 (sec)
	Peak temperature—260°C Max. 10 (sec)
	Soldering area temperature—217°C, 60-150 (sec)

PTS645 Series

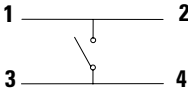
6 mm Tactile Switches



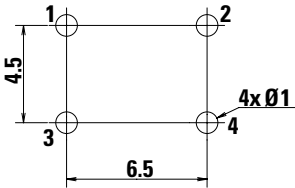
Termination (mm)
S Straight



SCHEMATIC



PCB LAYOUT

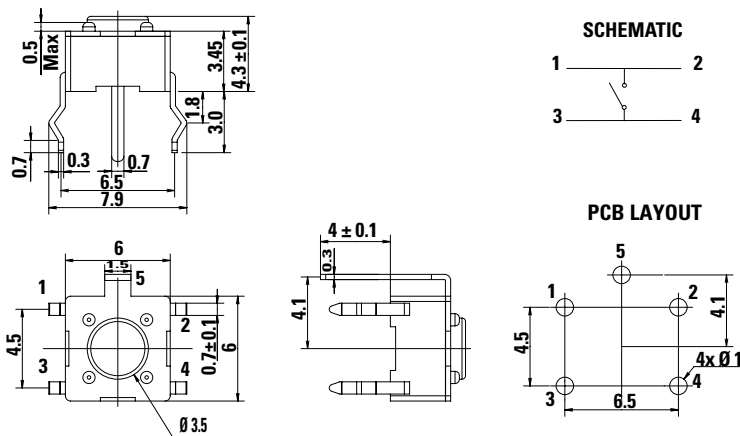


PTS645 Series

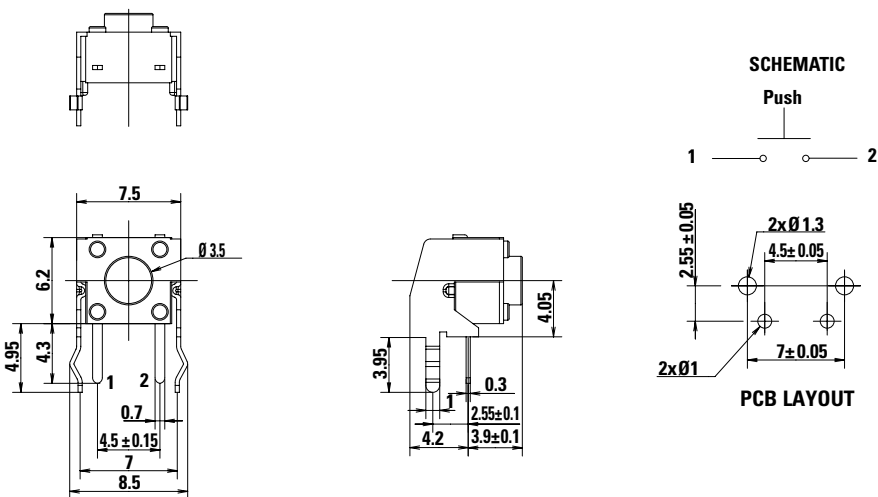
6 mm Tactile Switches



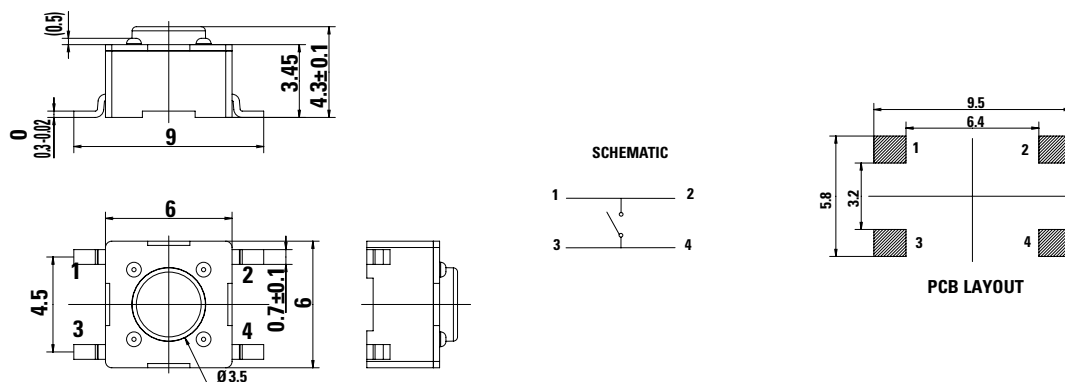
T Straight with ESD pin



V Vertical THT



SMT G Type

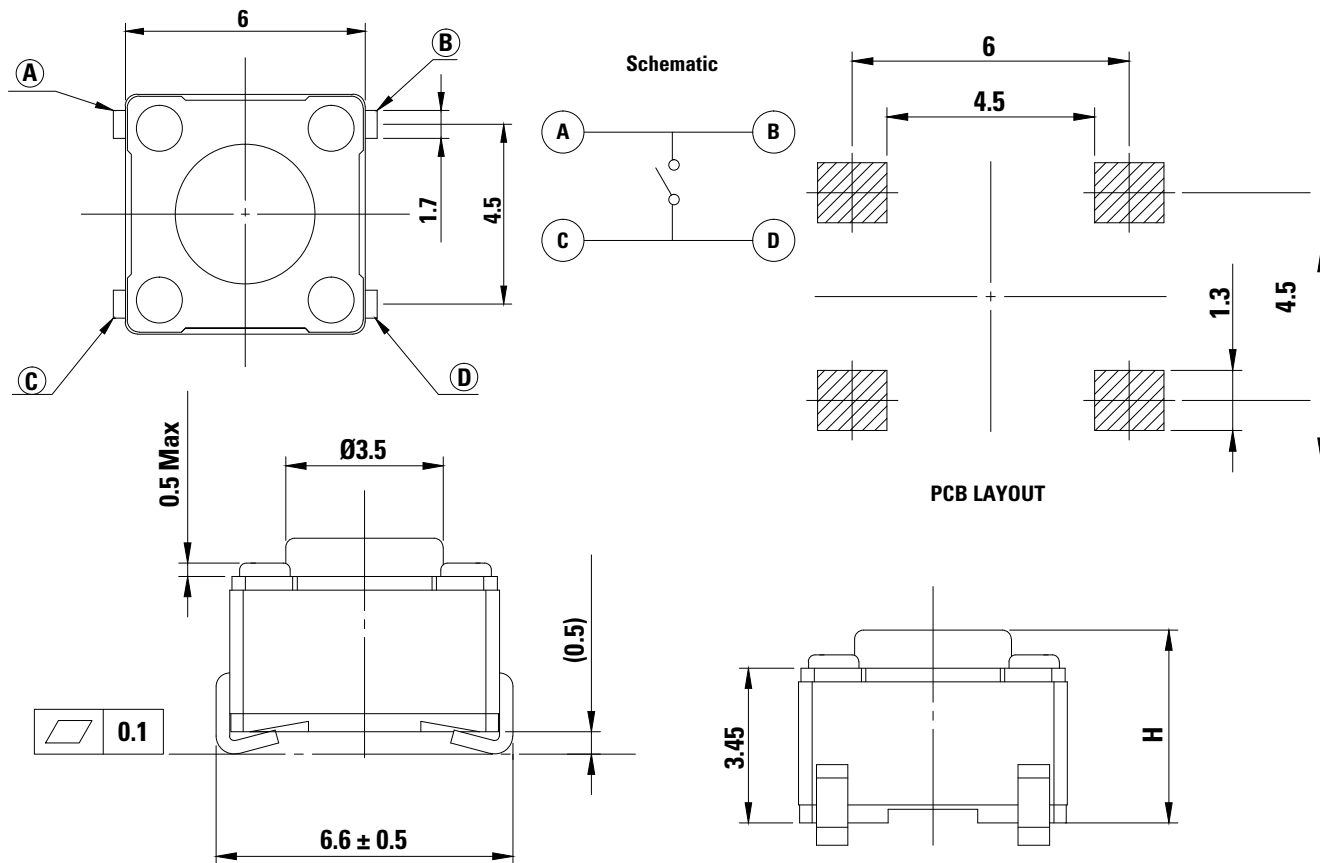


PTS645 Series

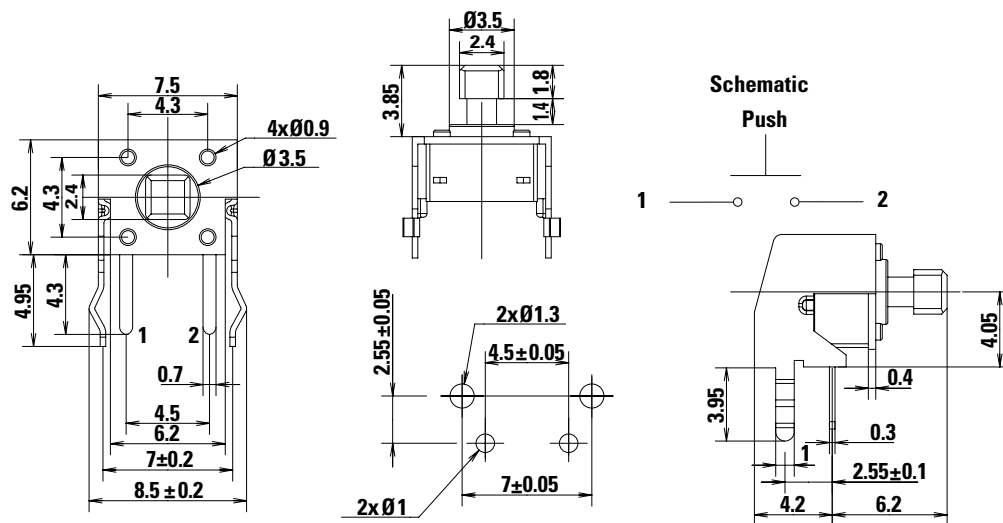
6 mm Tactile Switches



SMT J Type

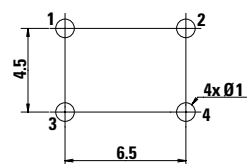


Actuator Shape J Square Actuator Vertical THT - for 6.15mm length only



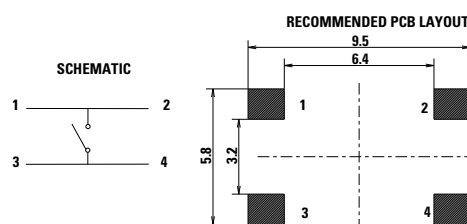
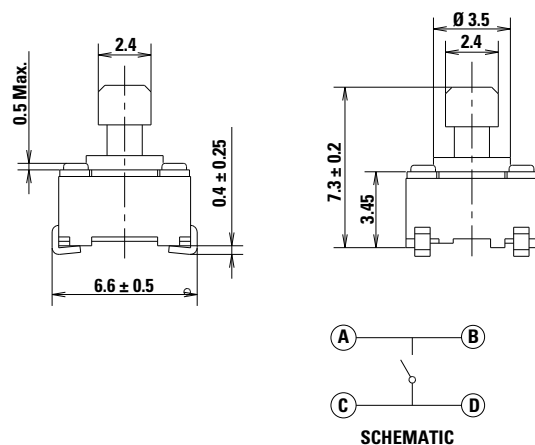
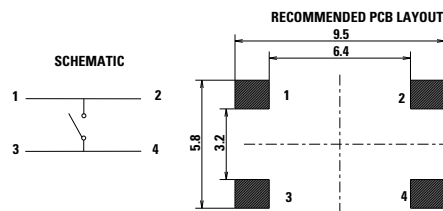
Recommended PCB Layout

Straight THT - for 7.3mm height only



The technical drawing shows three views of the lance head assembly:

- Top View:** Shows the overall dimensions. The total width is 9 ± 0.2 . The distance from the centerline to the side flange is 0.05 . The height of the main body is 3.45 . The total height, including the trigger gun attachment, is 7.3 ± 0.1 . The trigger gun has a width of 2.4 and a height of 1.8 . The distance from the top of the main body to the bottom of the trigger gun is 1.4 . A dimension of 0.3 ± 0.02 indicates the thickness of the side flange.
- Front View:** Shows the front profile of the lance head. The total width is 6 . The distance from the centerline to the side flange is 0.7 ± 0.1 . The height of the main body is 6 . The side flange has a thickness of 0.05 .
- Side View:** Shows the side profile of the lance head. The total width is 6 . The distance from the centerline to the side flange is 0.7 ± 0.1 . The height of the main body is 6 . The side flange has a thickness of 0.05 .

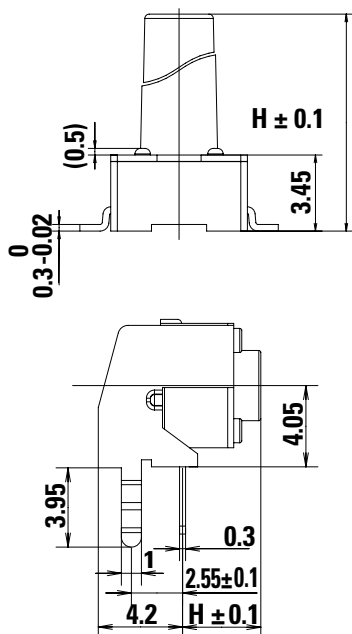


PTS645 Series

6 mm Tactile Switches



Actuator Height



Tape Dimension

Option Code	Width Tape	Pocket Height
43	16 ± 0.3	5.3
50		7.3
70		7.6
73	24 ± 0.3	10.3
95		13.3
13		

Actuation Force

Option Code	Force
L	130 grams Black
M	160 grams Blue
H	200 grams Gray
K	260 grams Red

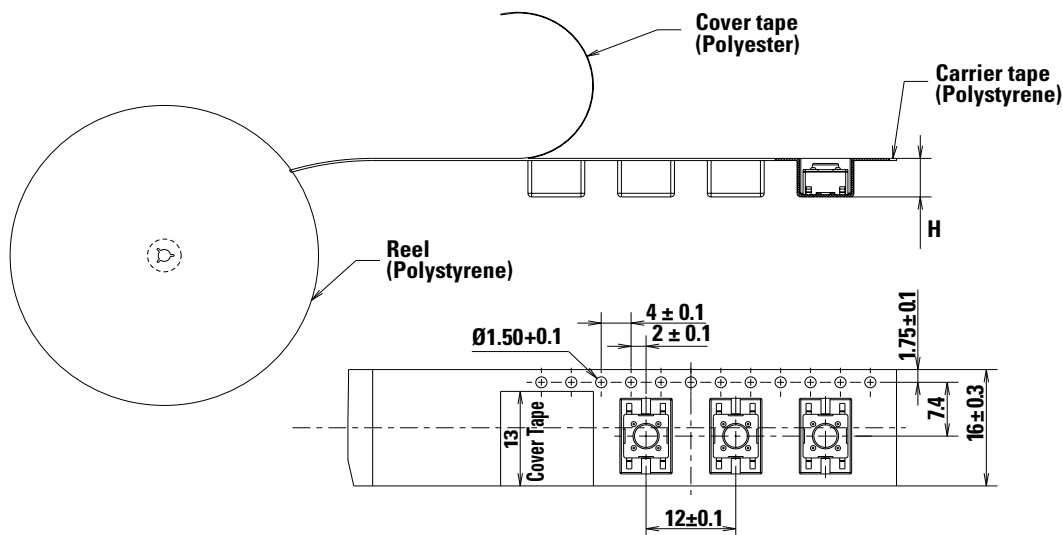
Switch height from PCB for S and T only

Option Code	Dimension H	Termination	Schematic	
			Without EMC pin	With EMC pin
43	4.3 (0.169)	Thru-hole and SMT		
50	5.0 (0.197)			
70	7.0 (0.275)			
95	9.5 (0.374)			
13	13.0 (0.512)	SMT		

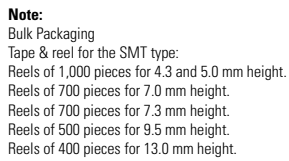
Switch length from font leads for V only

Option Code	Dimension H	Termination	Schematic	
			Without EMC pin	With EMC pin
31	3.15 (0.124)	Vertical		
39	3.85 (0.151)			
58	5.85 (0.230)			
83	8.35 (0.329)			

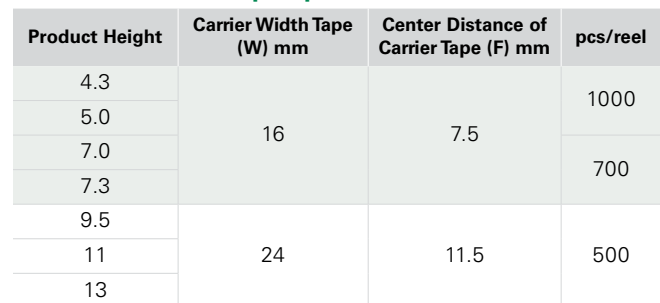
Tape & Reel for SMT G type Versions



Packaging



Tape Specifications



Note:
The disc rotates counterclockwise. According to the packing shown in the figure, the braid must not be twisted to prevent product deformation.

PTS645 Series

6 mm Tactile Switches



Ordering Number

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.

PTS645 - x - x - x - xx - xxxxxxxx - LFS

Termination S: Straight T: Straight with ESD pin V: Vertical THT Actuator Shape None: Round actuator, All versions J: Square actuator, 2.4 mm side (available for Straight 7.3 mm and Vertical 6.15 mm)	Actuation Force N: 100 gf L: 130 gf M: 160 gf H: 200 gf K: 260 gf P: 320 gf R: 360 gf	Insertion Type 2: Thru hole SMTR92¹: Surface mount G-type, tape & reel JSMTR92¹: Surface mount J-type, tape & reel 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 and SMT, square actuator 2.4 mm side only 95: 9.5 (.374), thru-hole and SMT 13: 13.0 (.512) SMT only 11: 11.0 (.433) 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	RoHS compliant and compatible, Silver plated
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Notes:

1. Only the straight type termination without ESD pin is available in SMT type
 Long life version has to be created case by case as special part number

Liability Limitation

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipment. Please contact customer service for the contractual specification package.

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