

PTS647 Series

Tactile Switch for SMT 4.5 x 4.5 mm



Description

The PTS647 series is a small 4.5 x 4.5 form factor in SMT version with 3 different heights and 3 available actuation forces, ideal for general usage applications

Features & Benefits

- Compact size 4.5 x 4.5 mm
- Choice of actuation forces
- SMT terminals
- Tape & reel
- Different actuator heights

Applications

- Consumer
- Industrial control panels
- Computer products

Specifications

Function	Momentary action
Contact Arrangement	1 make contact = SPST, N.O.
Terminals	Gullwing type for SMT

Notes:

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

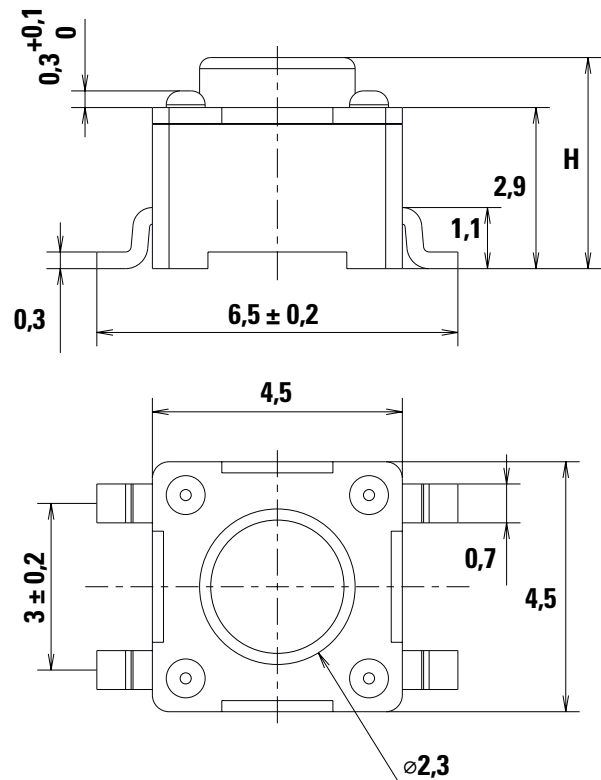
Electrical Specifications

Dielectric Strength (50 Hz, 1 min.)	250 VA C (1mn)
Contact Resistance	100 mΩ max. initial
Insulation Resistance (100 V)	100 MΩ min.
Bounce Time	≤ 5 ms
Maximum Power	0.6 W
Maximum Voltage	12 VDC
Minimum Voltage	5 VDC
Maximum Current	50 mA
Minimum Current	1 mA

Environmental Specifications

Operating Temperature	-40°C to 85°C
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Dimensions (mm)

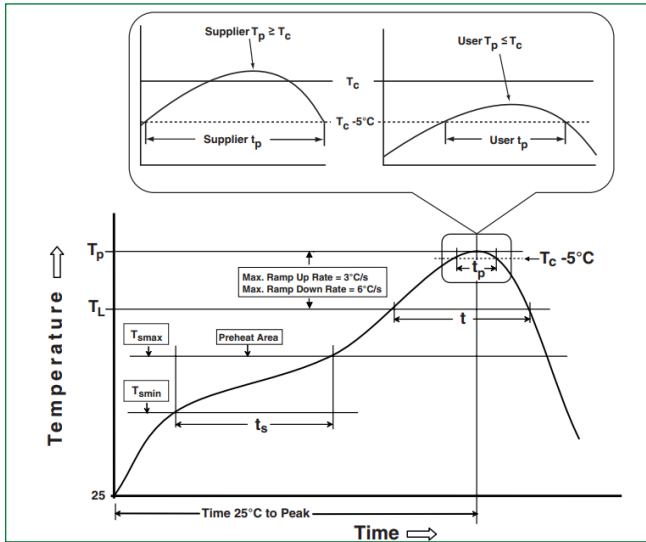


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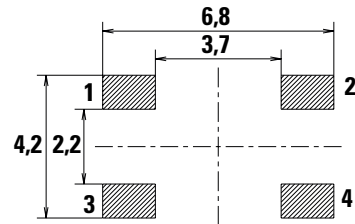


Soldering Profile

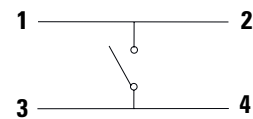


Terminations (mm)

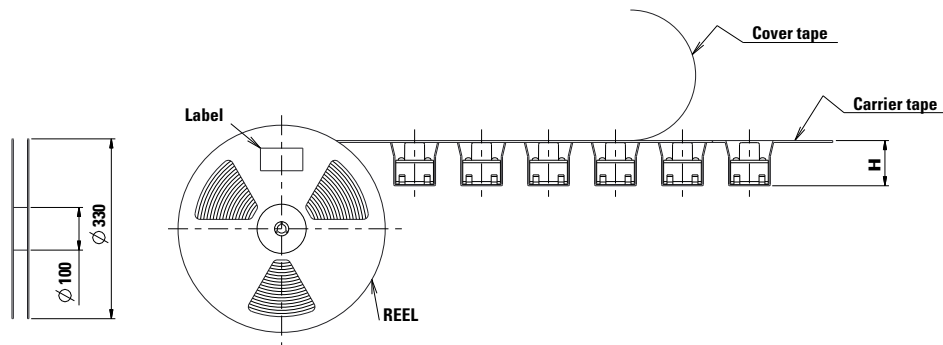
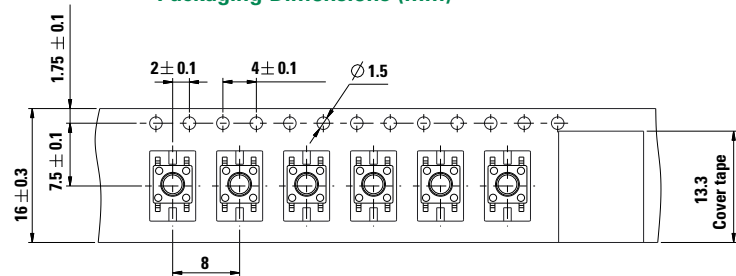
Recommended PCB Layout



Schematic



Packaging Dimensions (mm)



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Process

Packaging	In reels of 1,000 pieces for 7.0 mm In reels of 1,500 pieces for 5.0 mm In reels of 2,000 pieces for 3.8 mm Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 330 mm ± 2 mm.
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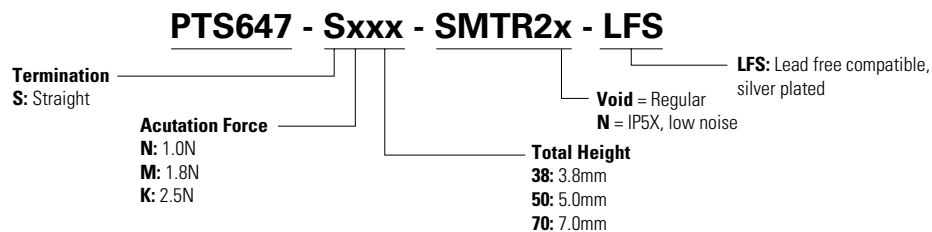
Notes:
Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center. The PTS series is not certified for using in Automotive application and no PPAP. However, in the case of some automotive accessories and specific applications for 2 and 3 wheeled vehicles the PTS is widely used and very suitable. Please contact your local representative to discuss your application and the best switch solution.

Pocket Height (mm)

Part #	Pocket Height (H)
PTS647 SN38 SMTR2 LFS	4.2 mm
PTS647 SM38 SMTR2 LFS	
PTS647 SK38 SMTR2 LFS	
PTS647 SN50 SMTR2 LFS	5.4 mm
PTS647 SM50 SMTR2 LFS	
PTS647 SK50 SMTR2 LFS	
PTS647 SN70 SMTR2 LFS	7.2 mm
PTS647 SM70 SMTR2 LFS	
PTS647 SK70 SMTR2 LFS	

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.



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Mechanical Characteristics

Supply Status	LITTELFUSE Orderable Part Number	Description	Contact & Terminals Plating	Terminals	Operating Force Fa (Newtons)	Operating Life (operations)	Electrical Travel (mm)	Product Height from PCB (mm)	Actuator Color
✓	Y97KT23B5NAFP	PTS647SK38SMTR2 LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.25 +/-0.1	3.8	Black
✓	G01688055	PTS647SK38SMTR2N LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.2 +/-0.1	3.8	Blue
✓	Y97KT23B5FAFP	PTS647SK50SMTR2 LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.25 +/-0.1	5.0	Black
✓	G01688058	PTS647SK50SMTR2N LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.2 +/-0.1	5.0	Blue
✓	Y97KT23B5GAFP	PTS647SK70SMTR2 LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.25 +/-0.1	7.0	Black
✓	G01688061	PTS647SK70SMTR2N LFS	Silver	Gull Wing for SMT	2.5 +/- 0.5	200,000	0.2 +/-0.1	7.0	Blue
✓	Y97KT23B2NAFP	PTS647SM38SMTR2 LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	500,000	0.2 +/-0.1	3.8	Black
✓	G01688054	PTS647SM38SMTR2N LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	300,000	0.15 +/-0.1	3.8	Blue
✓	Y97KT23B2FAFP	PTS647SM50SMTR2 LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	500,000	0.2 +/-0.1	5.0	Black
✓	G01688057	PTS647SM50SMTR2N LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	300,000	0.15 +/-0.1	5.0	Blue
✓	Y97KT23B2GAFP	PTS647SM70SMTR2 LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	500,000	0.2 +/-0.1	7.0	Black
✓	G01688060	PTS647SM70SMTR2N LFS	Silver	Gull Wing for SMT	1.8 +/- 0.5	300,000	0.15 +/-0.1	7.0	Blue
✓	Y97KT23B0NAFP	PTS647SN38SMTR2 LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.2 +/-0.1	3.8	Black
✓	G01688053	PTS647SN38SMTR2N LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.15 +/-0.1	3.8	Blue
✓	Y97KT23B0FAFP	PTS647SN50SMTR2 LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.2 +/-0.1	5.0	Black
✓	G01688056	PTS647SN50SMTR2N LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.15 +/-0.1	5.0	Blue
✓	Y97KT23B0GAFP	PTS647SN70SMTR2 LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.2 +/-0.1	7.0	Black
✓	G01688059	PTS647SN70SMTR2N LFS	Silver	Gull Wing for SMT	1.0 +/- 0.5	500,000	0.15 +/-0.1	7.0	Blue

Notes: Supply status: ✓ Available for ordering.

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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