

# PTS845 Series

## 4.5x3.4mm SMT Side Actuated Tactile Switch



### Description

PTS845 series, the small and compact size side actuated tactile switch, has a size of only 4.5 x 3.4 x 3.3 mm. With the small and compact size, the switch allows designers to either free up space in PCB to add additional functionality, or reduce the overall size of their design. 80, 160 and 260 gf operating forces, which are the most common versions used in the market, are available. Bracket peg design of the switch provides premium quality and performance. PTS845 tactile switch accommodates a wide range of applications in the high-end consumer wearable and medical device markets, where compact solution is required.

### Features & Benefits

- 4.5 x 3.4 x 3.3 mm package
- 80, 160 & 260 gf versions
- SMT termination
- Up to 1,000,000 life cycles
- Side actuated with bracket peg design

### Applications

- Mobile radios
- Gaming peripherals
- Dash cameras
- Home automation

### Specifications

|                            |                            |
|----------------------------|----------------------------|
| <b>Function</b>            | Momentary action           |
| <b>Contact Arrangement</b> | 1 make contact = SPST NO   |
| <b>Terminals</b>           | SMT Termination            |
| <b>Travel</b>              | 0.2mm ± 0.1mm              |
| <b>Life</b>                | 100,000 & 1,000,000 cycles |

### Electrical Characteristics

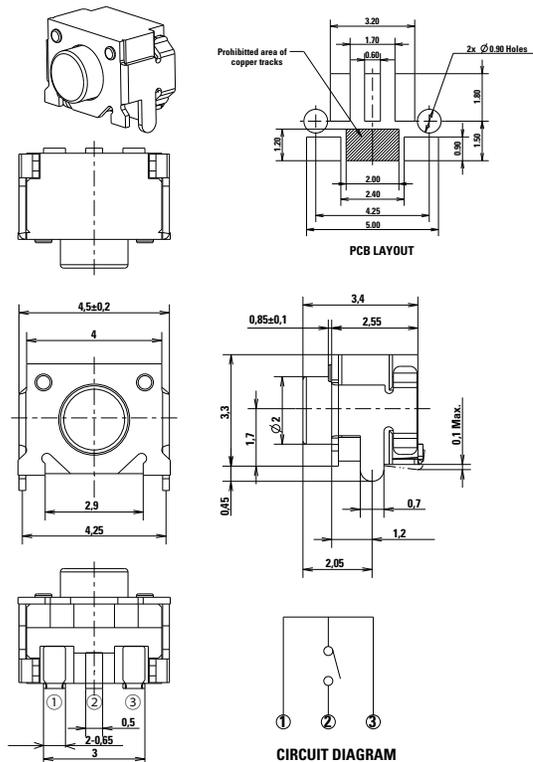
|                              |             |
|------------------------------|-------------|
| <b>Max. Voltage</b>          | 12 VDC      |
| <b>Max. Current DC</b>       | 50 mA       |
| <b>Dielectric Voltage</b>    | 10 mA       |
| <b>Contact Resistance</b>    | 100 mΩ      |
| <b>Insulation Resistance</b> | 100 mΩ min. |

### Environmental Characteristics

|                              |               |
|------------------------------|---------------|
| <b>Operating Temperature</b> | -40°C to 90°C |
| <b>Storage Temperature</b>   | -30°C to 80°C |

### Dimensions (mm)

#### With peg

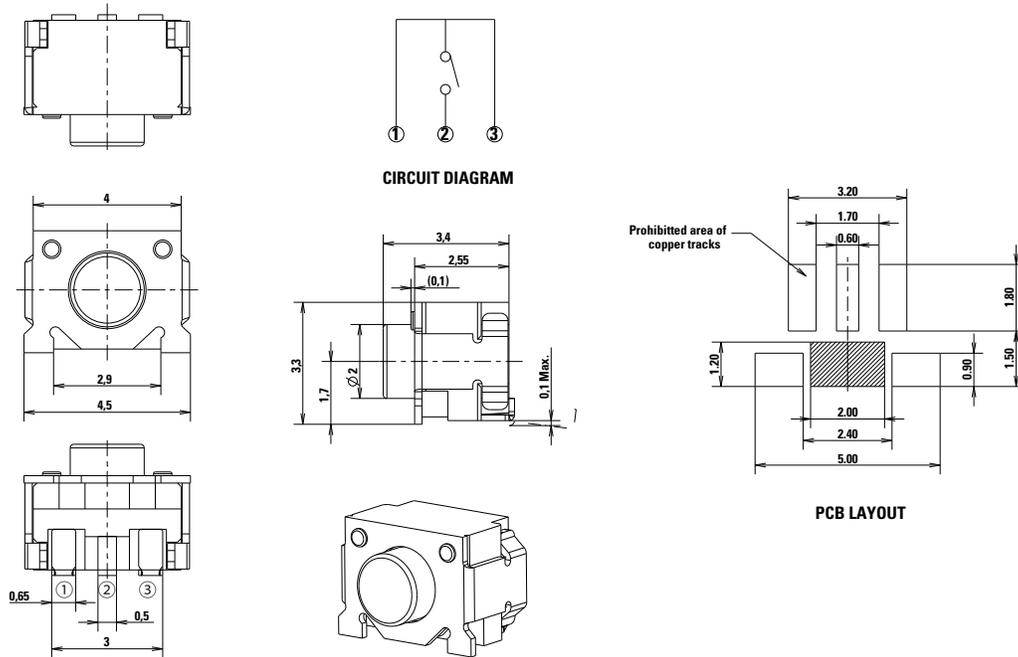


# PTS845 Series

## 4.5x3.4mm SMT Side Actuated Tactile Switch



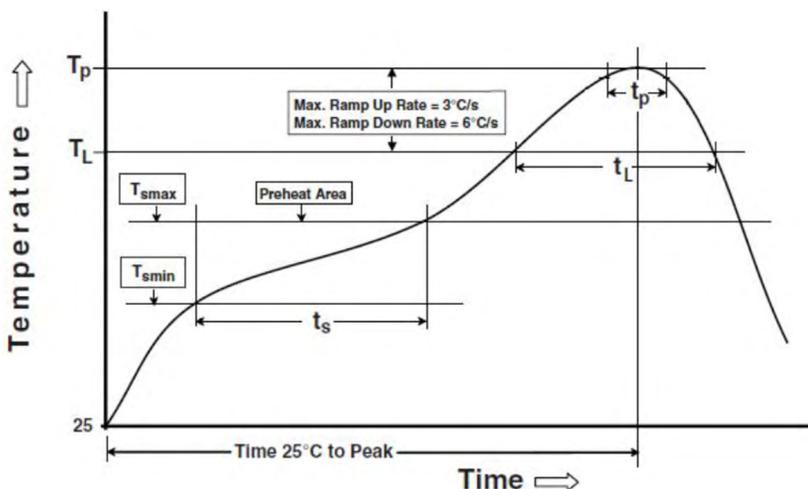
Without peg



### Mechanical Characteristics

| Part #                 | Force (gf) | Operating Life (cycles) | Peg | Actuator Colors |
|------------------------|------------|-------------------------|-----|-----------------|
| PTS845VN20PSMTR4 LFS   | 80 ± 40    | 100,000                 | Y   | Grey            |
| PTS845VM20PSMTR4 LFS   | 160 ± 50   | 100,000                 | Y   | Ivory           |
| PTS845VM20SMTR4 LFS    | 160 ± 50   | 100,000                 | N   | Ivory           |
| PTS845VM20PSMTR41M LFS | 160 ± 50   | 1,000,000               | Y   | Yellow Green    |
| PTS845VM20SMTR41M LFS  | 160 ± 50   | 1,000,000               | N   | Yellow Green    |
| PTS845VK20PSMTR4 LFS   | 260 ± 50   | 100,000                 | Y   | Black           |

### Soldering Profile



|                      |                                     |
|----------------------|-------------------------------------|
| <b>T<sub>p</sub></b> | Peak package body temperature 260°C |
| <b>T<sub>L</sub></b> | Liquidous temperature 217°C         |
| <b>T<sub>s</sub></b> | Preheat temperature 150-200°C       |
| <b>t<sub>s</sub></b> | Preheat time 60-120s                |
| <b>t<sub>p</sub></b> | 30s                                 |
| <b>t<sub>L</sub></b> | 60-150s                             |

Soldering: This component is suited to the following methods:

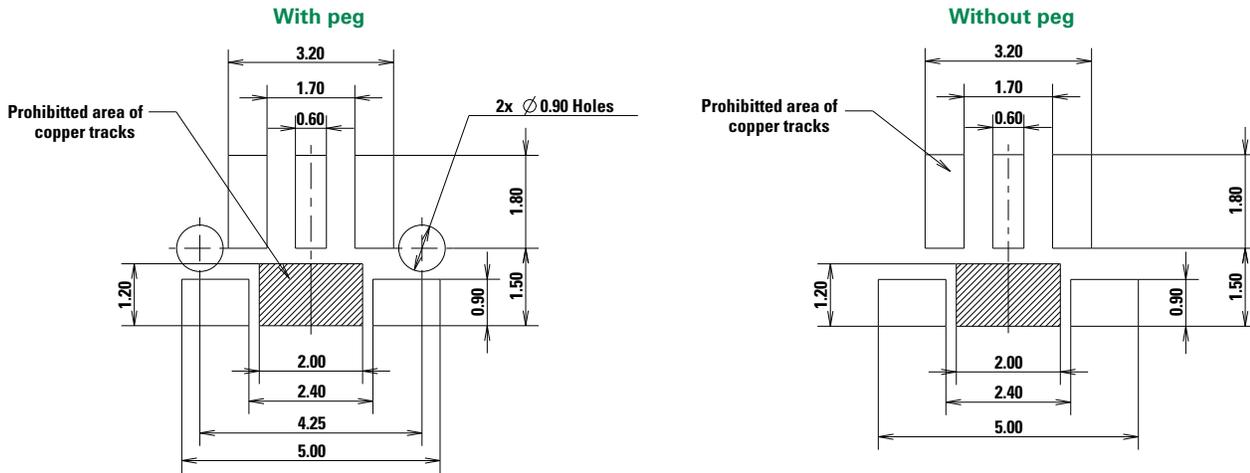
Infrared Reflow Soldering in accordance with IEC61760-1

# PTS845 Series

## 4.5x3.4mm SMT Side Actuated Tactile Switch

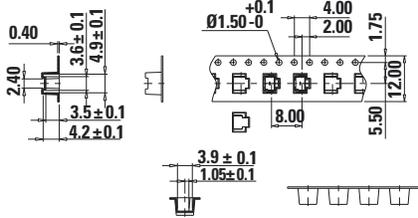


### Pad Layout Dimensions (mm)

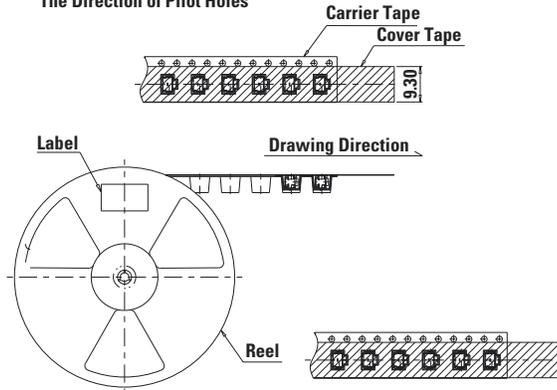


### Packaging Dimensions (mm)

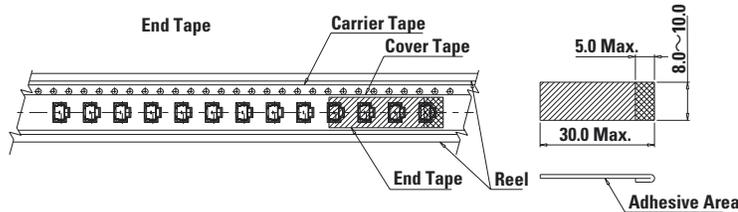
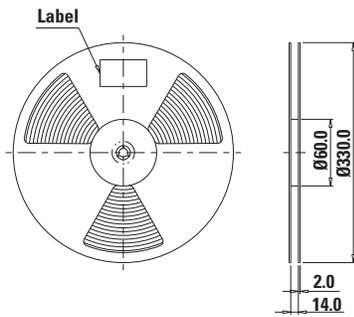
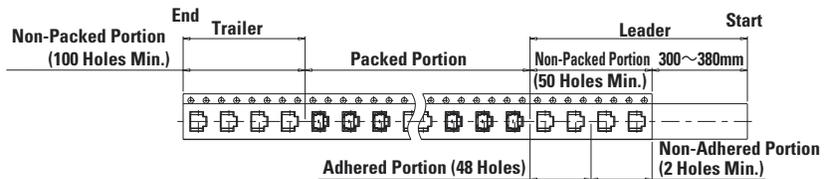
The Dimension of Carrier Tape, Cover Tape and Reel



The Direction of Pilot Holes



The Specification for Packaging



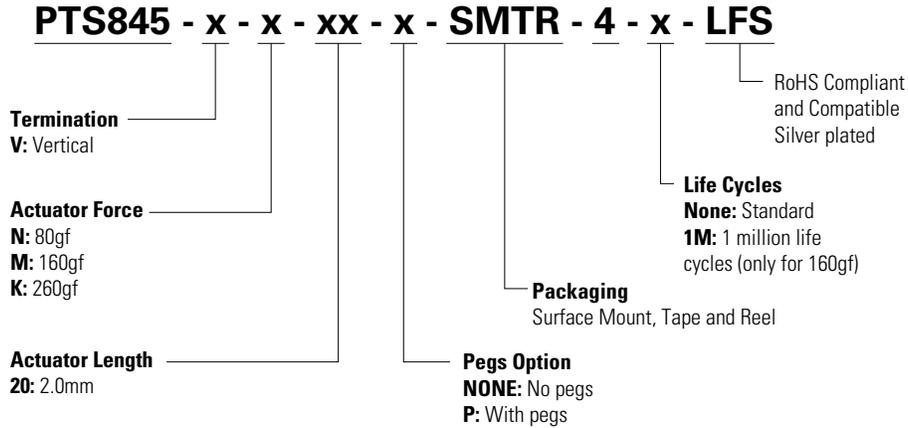
# PTS845 Series

## 4.5x3.4mm SMT Side Actuated Tactile Switch



### 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. For any part number different from those listed below, please consult your local representative.



### 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.

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.