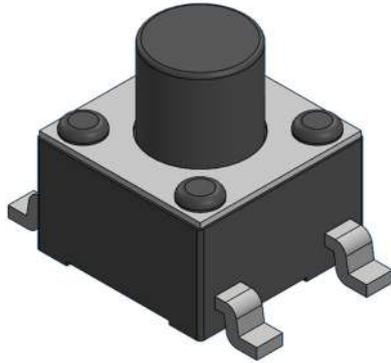


# PRODUCT SPECIFICATION

|                            |   |                 |    |                |          |
|----------------------------|---|-----------------|----|----------------|----------|
| <b>Part Number</b>         | SWT0211   | <b>Rev</b>      | A  | <b>Date</b>    | 30/04/25 |
| <b>Product Description</b> | Tactile Switch, 4.5 X 4.5mm, Top Actuated, SMT, SPST – NO |                 |    | <b>Page</b>    | 1        |
| <b>Doc Number</b>          | SWT0211   | <b>Prepared</b> | CC | <b>Checked</b> | YR       |
|                            |   | <b>Approved</b> |    |                | PH       |



## Features:

Outline: 4.5 X 4.5mm

Profile height: 5.00mm

Actuated Orientation: Top Actuated

Lead Type: Gull Wing

## Specification:

### Material

Housing: PPA, Black

Button: PPA, Black

Terminal: Brass

Contact: Stainless Steel

Cover: SPCC

### Plating

Terminal: Silver Plated

Contact: Silver Plated

Cover: Clear

### Electrical

Voltage & Current Rating:

12V DC, 50mA Max.

1V DC, 10uA Min.

Contact Resistance: 500mΩ Max.

Dielectric Withstanding Voltage: 250V AC

Insulation Resistance: 100 MΩ Min

### Mechanical & Environmental

Operating Temperature: -40°C to +85°C

Operating Force: 100±30gf

Travel: 0.18±0.10mm

Durability: 100,000 cycles

Solder Tails Co-planarity: 0.10mm Max.

## Ordering Grid:

Ordering Grid

SWT0211 — 0500 10 G S A

Profile Height  
0500 = 5.00mm

Operating Force  
10 = 100±30gf

Lead Type  
G = Gull Wing

Packing Options  
A = Tape & Reel  
(1500pcs per reel)

Contact Plating  
S = Silver

# GCT

[www.gct.co](http://www.gct.co)

# PRODUCT SPECIFICATION

|                            |   |                 |    |                |          |
|----------------------------|---|-----------------|----|----------------|----------|
| <b>Part Number</b>         | SWT0211   | <b>Rev</b>      | A  | <b>Date</b>    | 30/04/25 |
| <b>Product Description</b> | Tactile Switch, 4.5 X 4.5mm, Top Actuated, SMT, SPST – NO |                 |    | <b>Page</b>    | 2        |
| <b>Doc Number</b>          | SWT0211   | <b>Prepared</b> | CC | <b>Checked</b> | YR       |
|                            |   | <b>Approved</b> |    |                | PH       |

## Reflow Soldering Profile:

Pb-free reflow profile requirements

| Parameter                                  | Reference         | Specification   |
|--|-------------------|-----------------|
| Average temperature gradient in preheating |                   | 2.5°C/s         |
| Soak time                                  | t <sub>soak</sub> | 2-3 minutes     |
| Time above 217°C                           | t <sub>1</sub>    | 60 s            |
| Time above 230°C                           | t <sub>2</sub>    | 50 s            |
| Time above 250°C                           | t <sub>3</sub>    | 3 s             |
| Peak temperature in reflow                 | T <sub>peak</sub> | 255°C (-0/+5°C) |
| Temperature gradient in cooling            |                   | Max -5°C/s      |

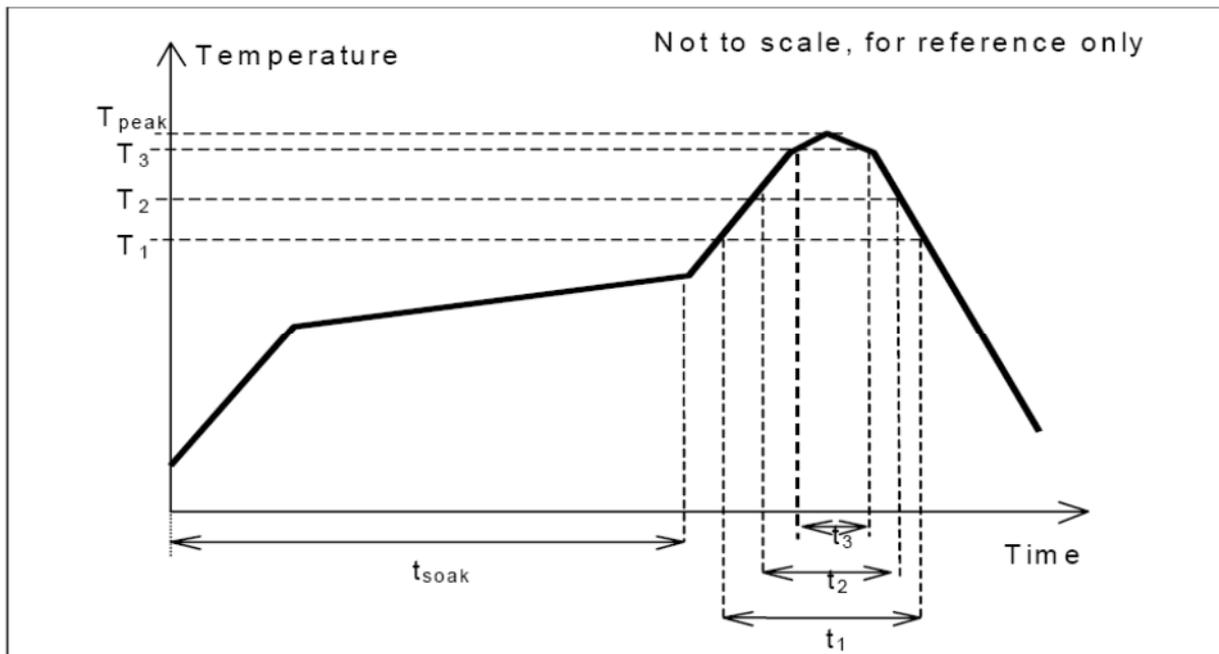


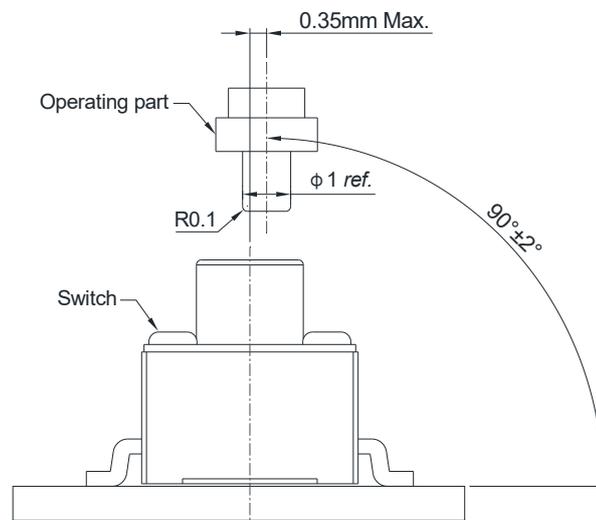
Fig. 1.0, this profile is the minimum requirement for evaluating soldering heat resistance of components. Heat transfer method used for reflow soldering is hot air convection. The actual air temperatures used to achieve the specified profile is higher and largely dependent on the reflow equipment.

# PRODUCT SPECIFICATION

|                            |   |                 |    |                |          |                 |    |
|----------------------------|---|-----------------|----|----------------|----------|-----------------|----|
| <b>Part Number</b>         | SWT0211   | <b>Rev</b>      | A  | <b>Date</b>    | 30/04/25 |                 |    |
| <b>Product Description</b> | Tactile Switch, 4.5 X 4.5mm, Top Actuated, SMT, SPST – NO |                 |    | <b>Page</b>    | 3        |                 |    |
| <b>Doc Number</b>          | SWT0211   | <b>Prepared</b> | CC | <b>Checked</b> | YR       | <b>Approved</b> | PH |

## Precaution for Operating:

1. Deviation of operating part from the centre axis of the switch shall be within 0.35mm.
2. Allowable operating angle:  $90 \pm 2$  degrees.
3. Do not overload and shock the switch.
4. Avoid pressing on the button with sharp objects.
5. Cleaning after product soldering is not allowed.
6. Avoid switching on for a long time.



## Recommended Operating Conditions

## Precaution for Handling and Storage:

1. Products are vacuum sealed in plastic bag with desiccant.
2. Recommended storage conditions:  $-20$  to  $+50^\circ\text{C}$ , 20% to 85% humidity.
3. Avoid exposing to corrosive gas, direct sunlight.
4. After the packaging is opened, use the products as quickly as possible.
5. Products that have not been used up must be vacuum sealed in plastic bag with desiccant.

# PRODUCT SPECIFICATION

|                            |   |                 |    |                |          |                 |    |
|----------------------------|---|-----------------|----|----------------|----------|-----------------|----|
| <b>Part Number</b>         | SWT0211   | <b>Rev</b>      | A  | <b>Date</b>    | 30/04/25 |                 |    |
| <b>Product Description</b> | Tactile Switch, 4.5 X 4.5mm, Top Actuated, SMT, SPST – NO |                 |    | <b>Page</b>    | 4        |                 |    |
| <b>Doc Number</b>          | SWT0211   | <b>Prepared</b> | CC | <b>Checked</b> | YR       | <b>Approved</b> | PH |

## Revision details:

| Revision | Information   | Page | Release Date |
|----------|---------------|------|--------------|
| 0.1      | First draft   | -    | 28/04/2025   |
| A        | First Release |      | 30/04/2025   |
|          |               |      |              |
|          |               |      |              |