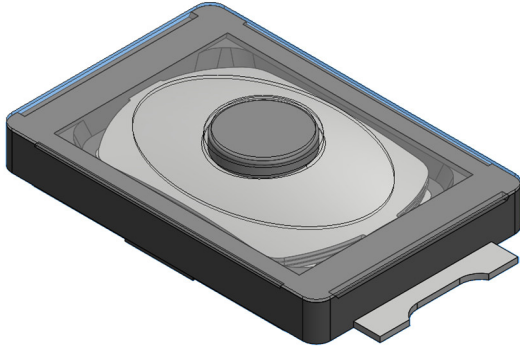


PRODUCT SPECIFICATION

Part Number	SWT7016			Rev	A		Date	30/04/25
Product Description	Tactile Switch, 3.0 X 2.0mm, Top Actuated, SMT, SPST – NO, IP67						Page	1
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Features:

Outline: 3.0 X 2.0mm

Profile height: 0.60mm

Actuated Orientation: Top Actuated

Lead Type: SMT

Specification:

Material

Housing: PPA, Black

Button: PA, Black

Terminal: Phosphor Bronze

Contact: Stainless Steel

Film: PA, Translucent

Plating

Terminal: Silver Plated

Contact: Silver Plated

Electrical

Voltage & Current Rating:

12V DC, 50mA Max.

2V DC, 10uA Min.

Contact Resistance: 500mΩ Max.

Dielectric Withstanding Voltage: 250V AC

Insulation Resistance: 50MΩ Min.

Mechanical & Environmental

Operating Temperature: -40°C to +85°C

Operating Force: 160±40gf

Travel: 0.15±0.05mm

Durability: 300,000 cycles

Ingress Protection Rating: IP67

Solder Tails Co-planarity: 0.10mm Max.

Ordering Grid:

Ordering Grid

SWT7016 = 0060 16 S S A

Profile Height
0060 = 0.60mm

Operating Force
16 = 160±40gf

Lead Type
S = SMT

Packing Options
A = Tape & Reel
(10000pcs per reel)

Contact Plating
S = Silver



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PRODUCT SPECIFICATION

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Reflow Soldering Profile:

Pb-free reflow profile requirements

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

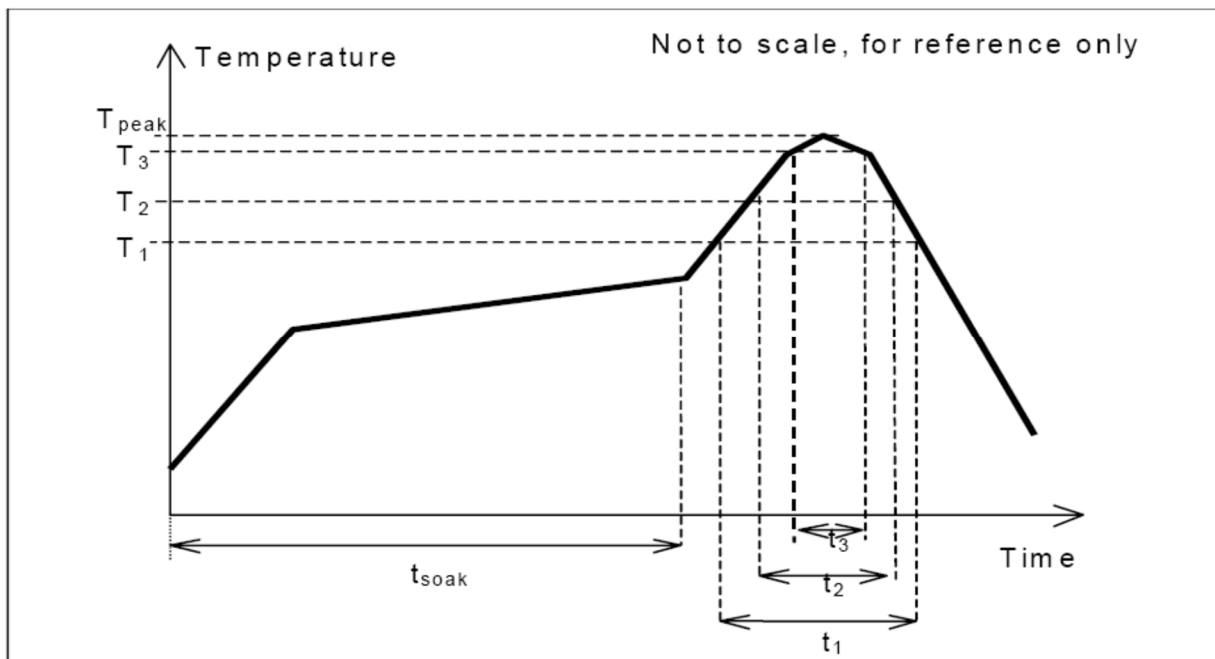


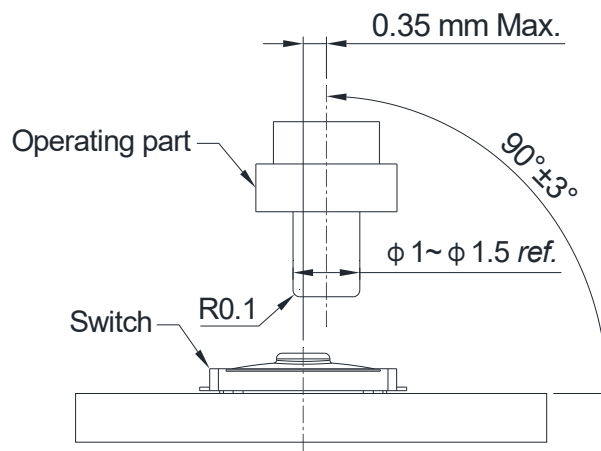
Fig. 1.0, this profile is the minimum requirement for evaluating soldering heat resistance of components. Heat transfer method used for reflow soldering is hot air convection. The actual air temperatures used to achieve the specified profile is higher and largely dependent on the reflow equipment.

PRODUCT SPECIFICATION

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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 ± 3 degrees
3. Do not overload and shock the switch
4. Avoid pressing on the film 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

Part Number	SWT7016			Rev	A		Date	30/04/25
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Revision details:

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

