

Part number SKQMASE010 6.0×3.5mm (Surface Mount) SKQM Series TACT Switch™

Automotive

Standard ?

Basic information



+ ZOOM

Type	Surface mount
Operating force	1.57N
Operating direction	Top push
Travel	0.25mm
Product height	4.3mm
Operating life	50,000 cycles
Initial contact resistance	500mΩ max.
Stem color	Black
Dimensions(W×D×H)	6.0×3.5×4.3

Specifications

Series type		Sharp feeling type
Operating temperature range		-40°C to +90°C
Absolute Maximum Ratings		50mA 12V DC
Rating (min.)		10μA 1V DC
Electrical performance	Insulation resistance	100MΩ min. 100V DC for 1 min.
	Voltage proof	250V AC for 1 min.
Durability	Vibration	10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2 hours respectively
Environmental performance	Cold	-40°C 96h
	Dry heat	90°C 96h
	Damp heat	60°C, 90 to 95%RH 96h
Minimum order unit(pcs.)	Japan	2,000
	Export	2,000

Selection Guide PDF
A definitive selection guide covering comprehensive information on TACT Switch™



View PDF ...>

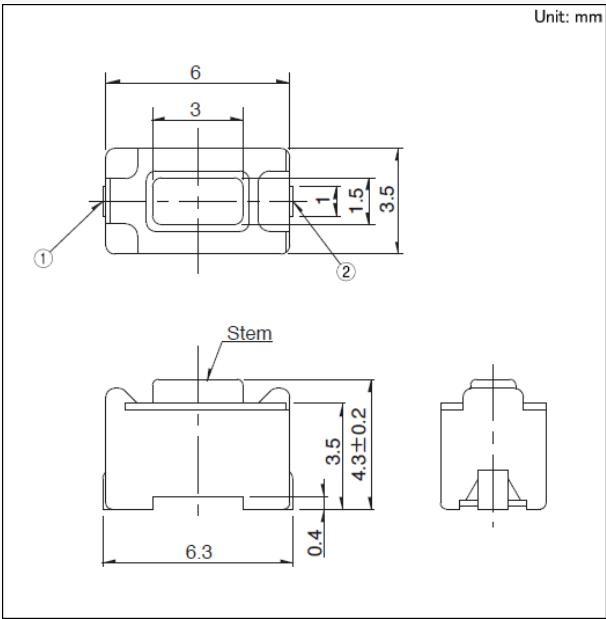


How to Prevent TACT Switch™ Failure
Pre-Use Checklist



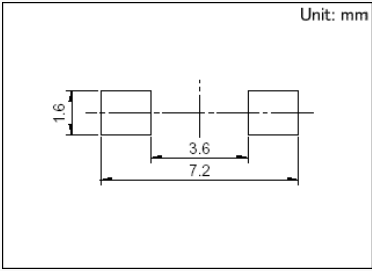
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Dimensions



Open an expandable image in a separate window

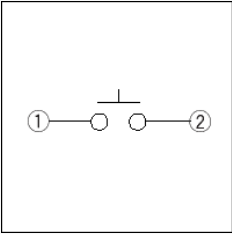
Land Dimensions



[Open an expandable image in a separate window](#)

Viewed from mounting face.

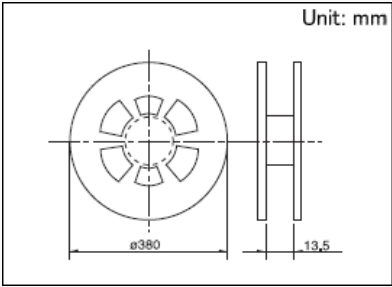
Circuit Diagram



[Open an expandable image in a separate window](#)

Packing Specifications

Taping



Number of packages (pcs.)

1 reel	2,000
1 case / Japan	20,000
1 case / export packing	20,000

Tape width (mm)

12

Export package measurements (mm)

395×395×205

Condition for Reflow

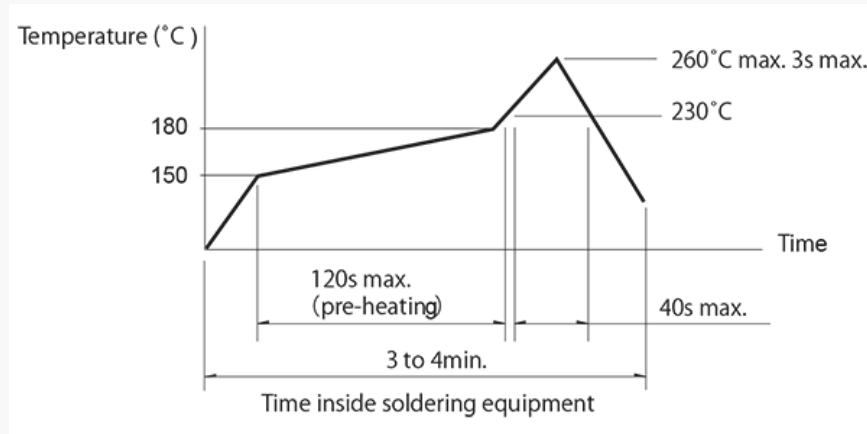
1. Heating method

Double heating method with infrared heater.

2. Temperature measurement

Thermocouple 0.1 to 0.2 Φ CA(K) or CC(T) at solder joints (copper foil surface). A heat resisting tape should be used for fix measurement.

3. Temperature profile



(1) The above temperature shall be measured of the top of switch. There are cases where PC board's temperature greatly differs from that of the switch, depending on the material, size, thickness of PC board's and others. Care, should be taken to prevent the switch's surface temperature from exceeding 260°C.

(2) Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

4. Allowable soldering time : 2 times Max.

Manual Soldering

Soldering temperature

350°C max.

Duration of soldering

3s max.

Capacity of soldering iron

60W max.

1. Do not washing the TACT Switch™.
2. Prevent flux penetration from the top side of the TACT switch™.
3. Switch terminals and a PC board should not be coated with flux prior to soldering.
4. The second soldering should be done after the switch returns to normal temperature.

Members-Only Content

SKQMASE010

MEMBERS ONLY



Product Drawing

File format: PDF



Product Material List



File format: PDF



F-S Curve



File format: PDF

Notes are common to this series/models

1. This site catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
2. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

Cautions

1. When terminals are exposed to mechanical stress during soldering, it may cause degradation in deformation and electrical property.
2. Through-hole PC board, or a PC board thickness other than the recommendation may cause larger heat stress. Prior verification is highly recommended.
3. In prior to the 2nd soldering switch shall be stable with normal temperature. It may cause deformation of switch, loose terminals, terminal removed from PC board, and / or degradation of electric property.
4. Verify samples with actual mass production conditions.
5. After soldering, do not wash switches with a solvent, etc.
6. The products are designed and manufactured for direct current resistance. Individual consultation is recommended for use of other resistances such as inductive (L) or capacitive (C).
7. The sizes of holes and patterns on a PC board for mounting a switch, be asper the recommended dimensions in the product drawings.
8. This switch is designed for manually operated units. Must not use this switch for a mechanical detection unit. For detection purposes, please use our detection switch.
9. The switch will be broken if impact force or a greater stress than that specified is applied. Take great care not to let the switch be subject to greater stress than specified.
10. Do not apply a force from the side of the stem.
11. Be sure to push the center of switch for “without-stem” type. Extreme care is required for a hinge structure type, as the activation point may shift when it is pressed down.
12. The circuit setting (software setting) shall be ensured for error-free operations, caused by bounce and chattering as specified by each model of the switches.
13. Prior verification is needed to ensure that no corrosive gas-generating components are used near our switch. It may give negative influence such as contact failure.
14. Contact resistance of a carbon contact type may vary depending on push force. Confirm that it functions sufficiently in using TACT Switch™ with a voltage divider circuit.
15. Be aware of dust intrusion into a non dust-proof TACT switch™.
16. Storage
 1. Store the products as delivered, at a normal temperature and humidity, without direct sunshine and corrosive gas ambient. Use them at an earliest possible timing, not later than six months upon receipt.
 2. After breaking the seal, keep the products in a plastic bag to prevent out ambient air, store them in the same environment as above, and use all as soon as possible.
 3. Do not stack too many switches.
 4. Store the key switches in released position.
17. TACT Switch is a trademark or registered trademark of Alps Alpine Co., Ltd.

