

■ Checklist Before Inquiry

When specifying Light Touch Switches, please take advantage of our standard products for better price and delivery. Please inquire about the following items before ordering.

Item			Information (Requirements)
Common	C-1	Inquiry purpose	New use, Modification, Others ()
	C-2	Modification	Previous supplier
			Conventional part No.
	C-3	Application	Purpose
			Equipment
			Environment Indoor/Outdoor use, Stationary/Portable set, Car installation High humidity, SO ₂ , NaCl
Electrical Specifications	E-1	Temperature	
		(°C) to (°C)	
Shapes/Dimensions	M-1	Operation type	· Vertical (The push plate operation is perpendicular to the printed circuit board) · Horizontal (The push plate operation is parallel to the printed circuit board)
		Mounting height	(mm) Height of the switch from mounting surface unit · Vertical (From the push plate tip to mounting surface of the printed circuit board) · Horizontal (From the push plate tip to the terminal on the push plate side)
		Operating force	(N)
		Travel	(mm)
	M-2	Anti-electrostatic	Ground Terminal: With, Without
	M-3	Dimensions	() mm × () mm, height() mm
		Terminal Type (Reflow)	Flat Terminal, J-bent Terminal
		Positioning	Positioning Boss: with, without
Others	L-1	Soldering	Manual, Flow, Reflow
		Soldering Conditions	Temp.(°C), Time (s)
	L-2	Packing Unit	Polyethylene Bag (Bulk), Embossed Taping (Reel Pack), Racial Taping (Reel Pack), Stick
	L-3	Special requirements for endurance	
	L-4	Special requirements for safety	
	L-5	Other questionnaires	

Notes:

1. When selecting Switches, please consider using our standard products for better prices and short delivery times.
2. Please inform the following items when ordering.

■ Application Notes

When using our Light Touch Switches, please observe the following items ("prohibited items") and be cautious of the following in order to prevent dangerous accidents and deterioration of performance.

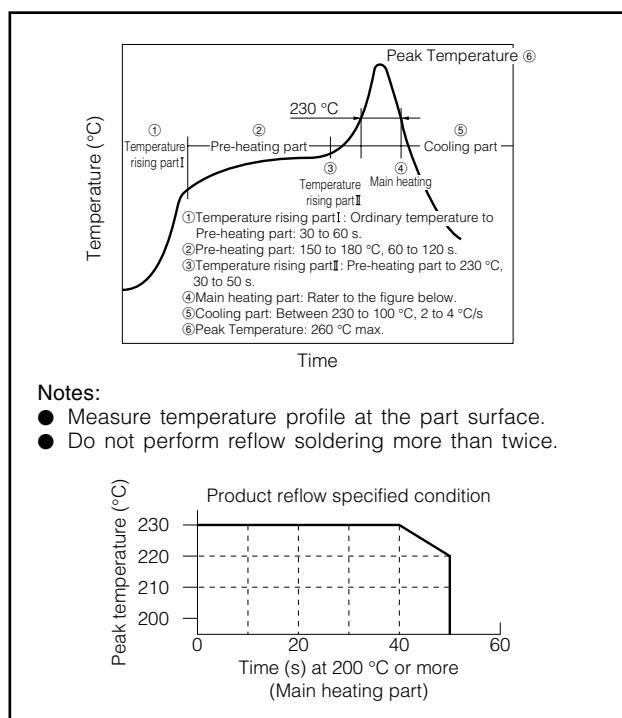
1. Notes on soldering conditions

When performing solder dipping, check the soldering conditions according to the "Product Specification for Information," because the conditions vary with the product. Do not wash the switch after solder dipping because flux may enter the switch, resulting in contact failure. Avoid use of jumper cables near the switches because flux may attach to them.

1. Control the liquid level so that flux does not enter the switch from the top.
2. When performing manual soldering, perform it at a temperature of 350 °C within 3 seconds.
3. Do not apply a load to the switch lever after soldering.
4. For reflow soldering

When performing reflow soldering using a hot-air oven or an infrared oven, observe the following conditions. Since the temperature applied to a switch and its terminals varies with the type and size of the PWB and the mounting density of the parts, sufficiently check the conditions in advance.

5. When a board with double-sided through holes is used, do not make through holes immediately under the switch case. Otherwise, the switch case may fuse.



2. Notes on design of a set

1. For switch mounting holes, refer to the "Recommended PWB piercing plan" as described in "Dimensions."
2. For shapes of operating parts in a set, refer to recommended shapes described in "Product Specifications for Information."

3. Other prohibited items and notes

1. Take care not to apply excessive load to a switch. Doing so may cause terminal deformation, contact failure, and/or malfunction.
2. Sufficiently check any generation of corrosive gas from the components in a set under actual operating conditions. Corrosive gas may cause contact failure and corrosive stress cracking of metal.
3. To prevent contact failure due to foreign matter (such as chips of a PWB and flux) entering a switch, take care when handling a PWB after mounting. Do not stack the PWB's.

4. Prohibited items and notes on storage conditions

Do not store the switches under high temperatures and/or high humidity, or in a location where corrosive gas may be generated. Store the switches at room temperature and room humidity in a packed condition. Use them within a maximum of 6 months after delivery. Check the date of manufacture on the package box and apply the "first-in-first-out" rule. If unpacked switches must be stored as inventory, store them in a polyethylene bag to keep out air.

5. Prohibited items on fire and smoking

1. Absolutely avoid use of a switch beyond its rated range because doing so may cause a fire. If misuse or abnormal use may result in conditions in which the switch is used out of its rated range, take proper measures such as current interruption using a protective circuit.
2. The grade of nonflammability for resin used in Light Touch Switches is "94HB", which is based on UL94 Standards (flammability test for plastic materials). Prohibit use in a location where a spreading fire may be generated or prepare against a spreading fire.

6. For use in equipment for which safety requested

Although care is taken to ensure switch quality, variation of contact resistance (increase), short circuits, open circuits, and temperature rise are some problems that might be generated.

To design a set which places maximum emphasis on safety, review the affect of any single fault of a switch in advance and perform virtually fail-safe design to ensure maximum safety by:

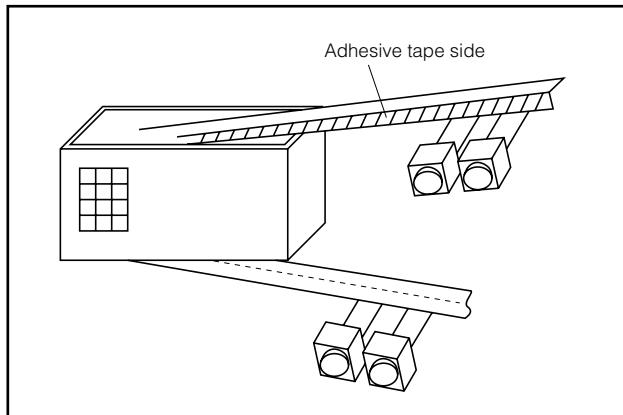
1. preparing a protective circuit or a protective device to improve system safety, and
2. preparing a redundant circuit to improve system safety so that the single fault of a switch does not cause a dangerous situation.

7. For actual use, be sure to refer to "Product Specifications for Information."

■ Common Specifications

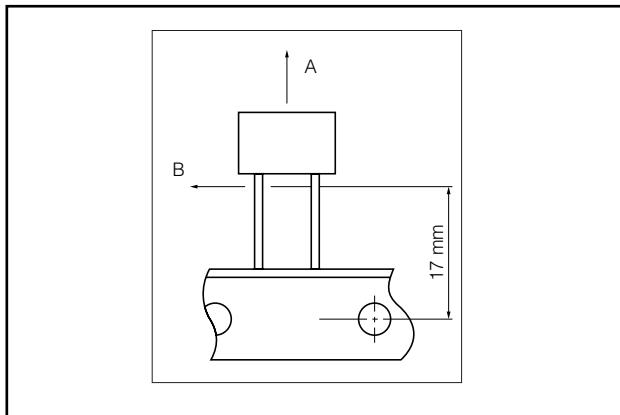
■ Packaging Methods for Radial Taping

- Drawing-out of taped products



Drawing-out can be done from top or bottom of an inner carton.

- Pull-strength of taped products



- Taped products shall not be fully drawn-out from the tape when pulling in direction A at 5.0 N max.
- Taped products shall not be drawn-out from the tape when pulling in direction B at 1.0N for 3 seconds.