



Available in two types - 0.8mm height without stem or 1.5mm height with stem.

Detector

Push

Slide

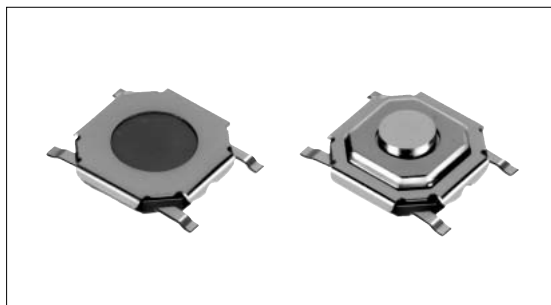
Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

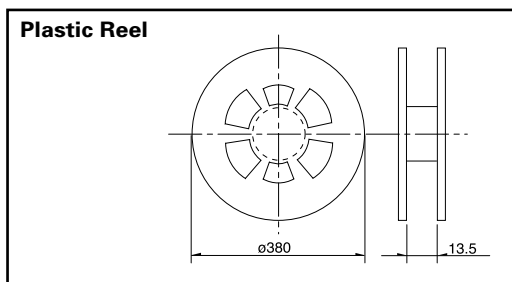
Custom-  
ProductsSharp  
FeelingSoft  
FeelingSnap-in  
TypeSurface  
Mount TypeRadial  
Type

### Product Line

| Product No. | Operating force | Operating direction | Travel (mm) | Rating (max.)     | Rating (min.) | Operating life (5mA 5V DC) | Initial contact resistance | Variety      | Minimum order unit (pcs.) | Drawing No. |
|-------------|-----------------|---------------------|-------------|-------------------|---------------|----------------------------|----------------------------|--------------|---------------------------|-------------|
| SKQGAE010   | 0.98N           | Vertical            | 0.25        | 50mA<br>12V<br>DC | 10μA<br>1V DC | 500,000cycles              | 100mΩ<br>max.              | Without stem | 5,000                     | 1           |
| SKQGAE010   | 1.57N           |                     |             |                   |               | 50,000cycles               |                            |              |                           |             |
| SKQGACE010  | 2.55N           |                     |             |                   |               | 50,000cycles               |                            |              |                           |             |
| SKQGAFE010  | 0.98N           |                     |             |                   |               | 500,000cycles              |                            | With stem    | 4,000                     | 2           |
| SKQGABE010  | 1.57N           |                     |             |                   |               | 50,000cycles               |                            |              |                           |             |
| SKQGADE010  | 2.55N           |                     |             |                   |               | 100,000cycles              |                            |              |                           |             |
| SKQGAKE010  | 3.43N           |                     |             |                   |               | 100,000cycles              |                            |              |                           |             |

### Specification of Embossed Taping Package (Taping Packaging for Auto-insertion)

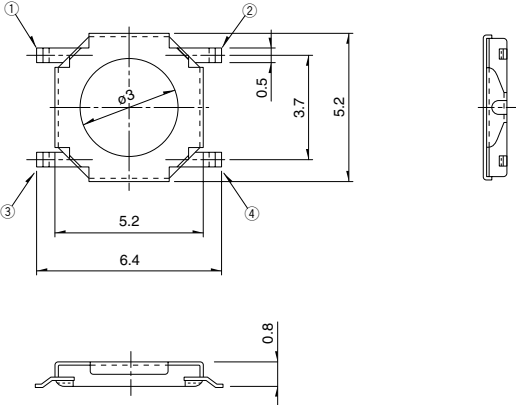
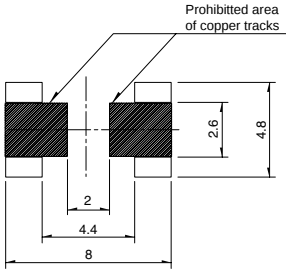
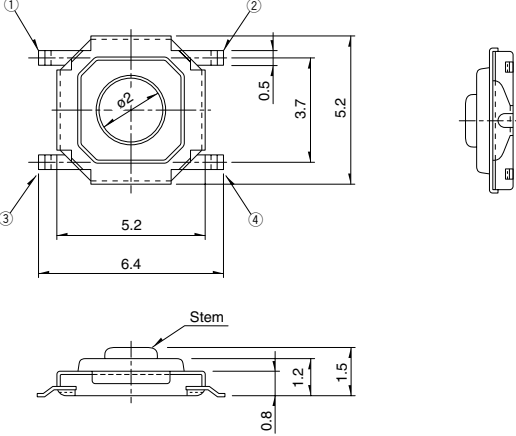
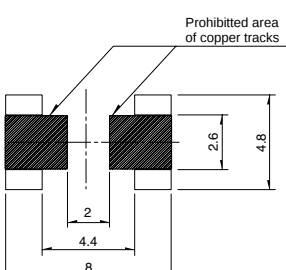
Reel Size Unit:mm



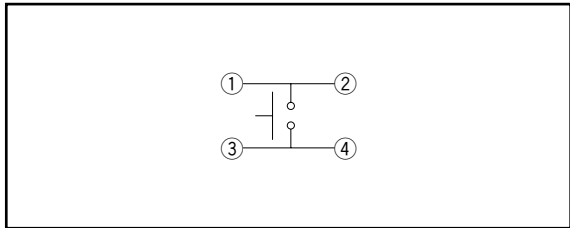
| Series                                | Number of packages ( pcs. ) |               |                        | Tape width ( mm ) |
|---------------------------------------|-----------------------------|---------------|------------------------|-------------------|
|                                       | 1 reel                      | 1 case /Japan | 1 case /export packing |                   |
| SKQGAA<br>SKQGAC<br>SKQGAE            | 5,000                       | 50,000        | 50,000                 | 12                |
| SKQGAB<br>SKQGAD<br>SKQGAF<br>SKQGAKE | 4,000                       | 40,000        | 40,000                 |                   |

### Note

- Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- For ø330mm diameter reel requirements, please contact us.

| Dimensions |                   |                                                                                     | Unit:mm                                                                              |
|------------|-------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| No.        | Photo             | Style                                                                               | PC board mounting hole dimensions<br>( Viewed from switch mounting face )            |
| 1          | Without stem type |   |   |
| 2          | With stem type    |  |  |

Circuit Diagram



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

Custom-  
Products

Sharp  
Feeling

Soft  
Feeling

Snap-in  
Type

Surface  
Mount Type

Radial  
Type

## List of Varieties

### Sharp Feeling Type

| Series                      |                       | SKQU                                                                                                                            | SKQB                                                                              | SKQE                                                                              | SKHC                                                                              | SKHK                                                                              | SKRW                                                                              | SKRM                                                                               | SKQR                                                                                | SKRB                                                                                | SKRR                                                                                | SKQG                                                                                |
|-----------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Photo                       |                       |                                                |  |  |  |  |  |  |  |  |  |  |
| Type                        |                       | Snap-in                                                                                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Surface mount                                                                     |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Features                    |                       | 4-direction switch + push switch                                                                                                | Water-proof Horizontal type                                                       | Long Life                                                                         | —                                                                                 | Long Stem                                                                         | Low-profile                                                                       |                                                                                    |                                                                                     |                                                                                     | Low-profile and long life                                                           | Low-profile                                                                         |
| Operating direction         | Vertical              | ●                                                                                                                               | —                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   |
|                             | Horizontal            | —                                                                                                                               | ●                                                                                 | —                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Dimensions (mm)             |                       | W                                                                                                                               | □ 10                                                                              | 11.5                                                                              | □ 12                                                                              |                                                                                   | □ 3.7                                                                             | □ 4.5                                                                              | □ 4.8                                                                               |                                                                                     | 7.5                                                                                 | □ 5.2                                                                               |
|                             |                       | D                                                                                                                               | 11.9                                                                              | 7                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                             |                       | H                                                                                                                               | 7.1                                                                               | 11.3                                                                              | 4.3                                                                               |                                                                                   | 12                                                                                | 0.35                                                                               | 0.4                                                                                 | 0.5                                                                                 | 0.55                                                                                | 0.6                                                                                 |
| Operation force coverage    |                       | 1N<br><br>5N                                                                                                                    | See the relevant pages for respective product descriptions                        | ●                                                                                 | ↕                                                                                 | ↕                                                                                 | ●                                                                                 | ↕                                                                                  | ↕                                                                                   | ↕                                                                                   | ↕                                                                                   | ↕                                                                                   |
| Ground terminal             |                       | —                                                                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Operating temperature range |                       | -30 to +85                                                                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Electrical performance      | Insulation resistance | 100MΩ min. 100V DC                                                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                             | Voltage proof         | 250V AC for 1min.<br>SKRW/RM/RB/RR : 100V AC for 1min.                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 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 2hours respectively |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                             | Lifetime              | Shall be in accordance with individual specifications.                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Environmental performance   | Cold                  | -30 ± 2 for 96h                                                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                             | Dry heat              | 80 ± 2 for 96h                                                                                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                             | Damp heat             | 60 ± 2 , 90 to 95%RH for 96h                                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Page                        |                       | 482                                                                                                                             | 265                                                                               | 267                                                                               | 268                                                                               | 270                                                                               | 271                                                                               | 272                                                                                | 273                                                                                 | 274                                                                                 | 275                                                                                 | 276                                                                                 |

W : Width. The most outer dimension excluding terminal portion.  
D : Depth. The most outer dimension excluding terminal portion.  
H : Height. The minimum dimension if there are variances.

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- Product Line of Knob for TACT Switch™ .....308

### Note

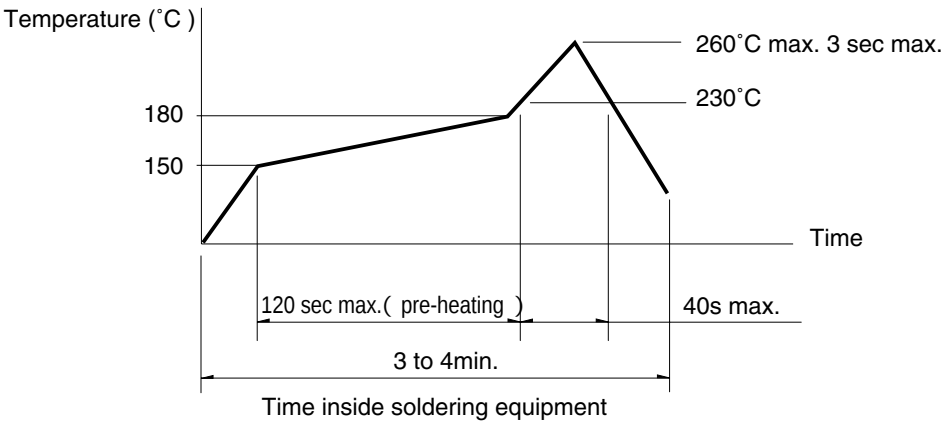
The automotive operating temperature range to be individually discussed upon request.

## Soldering Conditions

### Condition for Reflow

Available for Surface Mount Type.

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 resistive tape should be used to fix thermocouple.
3. Temperature profile



### Note

1. The above temperature shall be measured on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the material, size, thickness of PC boards and others. The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

### Conditions for Auto-dip

Available for Snap-in Type and Radial Type  
( Except SKHJ, SKHL, SKQJ, SKQK, SKEG series )

| Items                  | Condition                                                            |
|------------------------|----------------------------------------------------------------------|
| Flux built-up          | Mounting surface should not be exposed to flux                       |
| Preheating temperature | Ambient temperature of the soldered surface of PC board.<br>100 max. |
| Preheating time        | 60s max.                                                             |
| Soldering temperature  | 260 max.                                                             |
| Duration of immersion  | 5s max.                                                              |
| Number of soldering    | 2times max.                                                          |

### Manual Soldering ( Except SKRT Series )

| Items                      | Condition |
|----------------------------|-----------|
| Soldering temperature      | 350 max.  |
| Duration of soldering      | 3s max.   |
| Capacity of soldering iron | 60W max.  |

### Notes

1. Consult with us for availability of TACT Switch™ washing.
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 is stable with normal temperature.
5. Use the flux with a specific gravity of min 0.81.  
( EC-19S-8 by TAMURA Corporation, or equivalents. )

## Данный компонент на территории Российской Федерации

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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