# Compact, low-profile type with a height of 0.55mm







## ■ Typical Specifications

| Items                      | Specifications |
|----------------------------|----------------|
| Rating (max.)              | 50mA 12V DC    |
| Rating (min.)              | 10 µA 1V DC    |
| Initial contact resistance | 100mΩ max.     |

#### ■ Product Line

| Product No.  | Operating force | Operating direction | Travel (mm) | Operating life   | Minimum order unit (pcs.) |        |
|--------------|-----------------|---------------------|-------------|------------------|---------------------------|--------|
| T TOUGET NO. | Operating force | Operating direction |             | (5mA 5V DC)      | Japan                     | Export |
| SKRBAGE010   | 1.1N            |                     | 0.15        | 2,000,000 cycles |                           |        |
| SKRBAAE010   | 1.57N           | Top push            | 1,000,      | 1,000,000 cycles | 10.000                    | 10.000 |
| SKRBACE010   | 2.55N           | τορ ραδιτ           | 0.2         | 500,000 cycles   | 10,000                    | 10,000 |
| SKRBAKE010   | 3.5N            |                     |             | 200,000 cycles   |                           |        |

#### ■ Packing Specifications

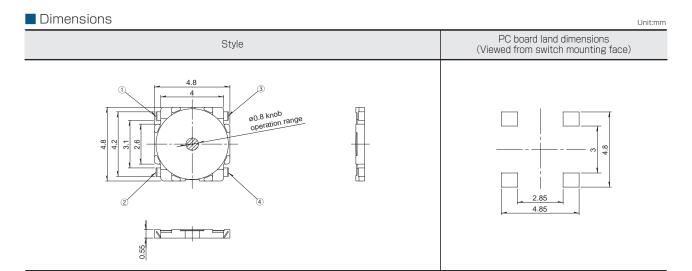
#### Taping

| Number of packages (pcs.) |                |                         | Tape width | Export package    |  |
|---------------------------|----------------|-------------------------|------------|-------------------|--|
| 1 reel                    | 1 case / Japan | 1 case / export packing | (mm)       | measurements (mm) |  |
| 10,000                    | 100,000        | 100,000                 | 12         | 395×395×205       |  |

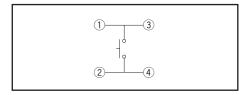
# Unit:mm Reel size

#### Note

For reels of 330mm diameter, please inquire.



#### ■ Circuit Diagram





|                           | Type                              |  |                          |            | Sharp Feeling Typ | <br>De                       |                |  |
|---------------------------|-----------------------------------|--|--------------------------|------------|-------------------|------------------------------|----------------|--|
|                           | Туре                              |  |                          |            | Surface Mount     |                              |                |  |
|                           | Series                            | SKSH   | SKRW                     | SKRM       | SKRB              | SKRR                         | SKQG           | SKTC   |
|                           | Photo                             |  | •                        |            |                   |                              | -              |  |
|                           | Features                          |  | Low-                     | profile    |                   | Low-profile<br>and long life | Low-profile    | Double action  |
|                           | Water-proof                       | _  | _                        | _          | _                 | _                            | _              | •  |
|                           | Dustproof                         | _  | _                        | _          | _                 | _                            | _              | •  |
|                           | IP standard                       | _  | _                        | _          | _                 | _                            | _              | 67 equivalent  |
| Operatir                  | Top push                          | •  | •                        | •          | •                 | •                            | •              | •  |
| directio                  |                                   | _  | _                        | _          | _                 | _                            | _              | _  |
|                           | W                                 | 3.3  |                          |            | □40               | 7.5                          | - □5.2         | 3.4  |
| Dimensio<br>(mm)          | ons D                             | 2.9  | - □3.7                   | □4.5       | □4.8              | 7                            |                | 2.2  |
|                           | Н                                 | 0  | .35                      | 0.4        | 0.55              | 0.6                          | 1.5            | 0.62   |
| Operation force coverage  | 2N to 3N                          | 1  | 1                        | 1          | Ĵ                 | <b>\$</b>                    |                | See the relevant pages for respective product descriptions       |
|                           | Travel (mm)                       | О  | ).15                     | 0.15       | 5/0.2             | 0.                           | 25             | See the relevant<br>pages for respective<br>product descriptions |
| Gi                        | round terminal                    | _  | _                        | _          | _                 | _                            | _              | _  |
| Operatin                  | g temperature range               | -30℃   | to +85℃                  |            | -40℃ to +85℃      |                              | -40°C to +90°C | −30°C to +85°C   |
| Aı                        | utomotive use                     | _  | _                        | _          | •                 | _                            | •              | _  |
|                           | Life Cycle                        | <b>*</b> 2   | *3                       | <b>*</b> 2 | <b>*</b> 2        | <b>*</b> 2                   | *3             | <b>*</b> 2   |
|                           | Rating (max.)<br>(Resistive load) |  |                          |            | 50mA 12V DC       |                              | -              |  |
| Electrical                | Rating (min.)<br>(Resistive load) |  | 10μA 1V DC               |            |                   |                              |                |  |
| performance               | Insulation resistance             |  | 100MΩ min. 100V DC 1min. |            |                   |                              |                |  |
|                           | Voltage proof                     | 100V AC 1min. 250V AC 1min. 100V AC 1  |                          |            |                   | 100V AC 1min.                |                |  |
| Durahilitu                | 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 |                          |            |                   |                              |                |  |
| Durability                | Lifetime                          | Shall be in accordance with individual specifications.   |                          |            |                   |                              |                |  |
|                           | Cold                              | -40°C 96h  |                          |            |                   |                              |                |  |
| Environmental performance | Dry heat                          | 90°C 96h   |                          |            |                   |                              |                |  |
|                           | Damp heat                         | 60℃, 90 to 95%RH 96h   |                          |            |                   |                              |                |  |
|                           | Page                              | 188  | 189                      | 190        | 191               | 192                          | 193            | 194  |

W: Width. The most outer dimension excluding terminal portion. D: Depth. The most outer dimension excluding terminal portion.

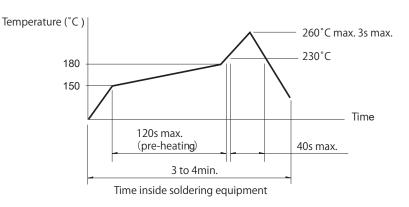
H: Height. The minimum dimension if there are variances.

- 1. The automotive operating temperature range to be individually discussed upon request.
- 2. Indicates applicability to all products in the series.



# TACT Switch™ / Soldering Conditions

#### ■ Condition for Reflow Available for Surface Mount Type. Temperature profile



#### Notes

- 1. Please confirm the specifications of our product for the detailed condition.
- 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.

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

#### **SKHH 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. 110℃ max. |
| Preheating time        | 60s max.   |
| Soldering temperature  | 260°C max.   |
| Duration of immersion  | 5s max.  |
| Number of soldering    | 2times max.  |

#### SKHL Top Push Type, SKQJ 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. 100℃ max. |
| Preheating time        | 45s max.   |
| Soldering temperature  | 255℃ max.  |
| Duration of immersion  | 5s max.  |
| Number of soldering    | 2times max.  |

## ■ Manual Soldering

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

#### SKHH, SKHW Series

| Items                      | Condition |
|----------------------------|-----------|
| Soldering temperature      | 360℃ max. |
| Duration of soldering      | 3s max.   |
| Capacity of soldering iron | 60W max.  |

#### SKTD, SKTG, SKQJ, SKSN Series

| Items                      | Condition |
|----------------------------|-----------|
| Soldering temperature      | 350℃ max. |
| Duration of soldering      | 3s max.   |
| Capacity of soldering iron | 20W max.  |

#### Notes

- 1. Prevent flux penetration from the top side of the TACT Switch $^{TM}$ .
- 2. Switch terminals and a PC board should not be coated with flux prior to soldering.
- 3. The second soldering should be done after the switch is stable with normal temperature.
- 4. Use the flux with a specific gravity of min 0.81.

(EC-19S-8 by TAMURA CORPORATION, or equivalents.)

# **Mouser Electronics**

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# Alps Alpine:

SKRBACE010 SKRBAAE010 SKRBAGE010 SKRBAKE010