

A micro switch type applicable to printed circuit and lead wiring. Can be screwed on panel



Detector

Slide

Push

Rotary

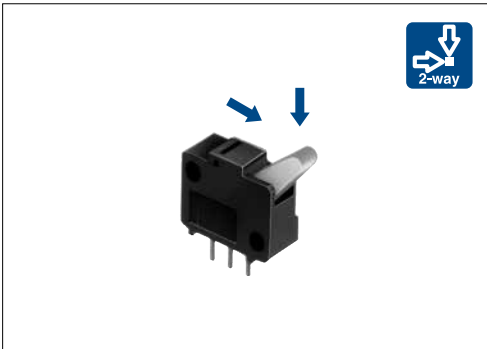
Power

Dual-in-line Package Type

General-purpose Type

Water-proof Type

Fast Switching Type



Typical Specifications

| Items | | Specifications |
|--|--------------|----------------------------|
| Rating (max.)/(min.) (Resistive load) | | 0.1A 12V DC / 50μA 3V DC |
| Contact resistance (Initial /After operating life) | | 200mΩ max. / 500mΩ max. |
| Operating force | | 0.7±0.3N |
| Operating life | Without load | 10,000cycles |
| | With load | 10,000cycles (0.1A 12V DC) |

Product Line

| Poles | Positions | Changeover timing | Operation part shape | Terminal type | Minimum order unit (pcs.) | | Product No. |
|-------|-----------|-------------------|----------------------|---------------|---------------------------|--------|-------------------|
| | | | | | Japan | Export | |
| 1 | 2 | Non shorting | Lever | For PC board | 1,000 | 5,000 | SSCTL10600 |
| | | | | For Lead | | | SSCTL10400 |

Packing Specifications

Bulk

| Number of packages (pcs.) | | Export package measurements (mm) |
|---------------------------|------------------------|----------------------------------|
| 1 case /Japan | 1 case /export packing | |
| 1,000 | 5,000 | 400×270×290 |

Dimensions

Unit:mm

| Style | PC board mounting hole dimensions (Viewed from direction A) |
|------------------|---|
| Lever | |
| | Contact changeover timing |

Travel position (X)
● Push direction only

Note

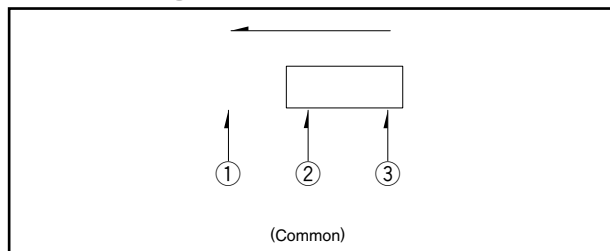
Dimensions drawing is for PC board terminal type.



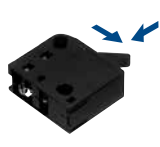





Terminal Type

Unit:mm

| For PC board | For Lead |
|--------------|----------|
| | |

Circuit Diagram (Viewed from Direction A)



| Series | | General-purpose Type | | | |
|--------------------------------|--|---|---|---|---|
| | | SSCT | SSCF | SSCW | SSCL |
| Photo | |  |  |  |  |
| Operation type | | Two-way | | | |
| Dimensions (mm) | W | 12.5 | 11 | 13.1 | 11 |
| | D | 5 | 5.8 | 11.35 | 16.1 |
| | H | 11.5 | 12.4 | 5.3 | |
| Operating temperature range | | -40°C to +85°C | | | |
| Automotive use | | ● | ● | ● | ● |
| Life cycle (availability) | |  |  |  |  |
| Poles / Positions | | 1/2 | | 1/1 | 1/2 |
| Rating (max.) (Resistive load) | | 0.1A 12V DC | | | |
| Rating (min.) (Resistive load) | | 50μA 3V DC | | 100μA 3V DC | 50μA 5V DC |
| Durability | Operating life without load | 10,000cycles 500mΩ max. | 50,000cycles 300mΩ max. | 100,000cycles 1Ω max. | 50,000cycles 1Ω max. |
| | Operating life with load Rating (max.) (Resistive load) | 10,000cycles 500mΩ max. | 50,000cycles 300mΩ max. | 100,000cycles 1Ω max. | 50,000cycles 1Ω max. |
| Electrical performance | Initial contact resistance | 200mΩ max. | 100mΩ max. | 500mΩ max. | |
| | Insulation resistance | 100MΩ min. 250V DC | 100MΩ min. 100V DC | 100MΩ min. 250V DC | 100MΩ min. 100V DC |
| | Voltage proof | 250V AC for 1minute | 100V AC for 1 minute | 250V AC for 1minute | 100V AC for 1minute |
| Mechanical performance | Terminal strength | 3N for 1minute | 5N for 1minute | — | |
| | Actuator strength | 20N | 10N | 20N | 10N |
| Environmental performance | Cold | -40°C 500h | | | |
| | Dry heat | 85°C 500h | | | |
| | Damp heat | 60°C, 90 to 95%RH 500h | | | |
| Operation force | | 0.7±0.3N | 0.7N max. | 1N max. | 0.7N max. |
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| | |
|--|----|
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Note
● Indicates applicability to all products in the series.

Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple $\phi 0.1$ to 0.2 CA (K) or CC (T) at soldering portion (copper foil surface).
A heat resisting tape should be used for fixed measurement.
3. Temperature profile



| Series (Reflow type) | A (°C) 3s max. | B (°C) | C (s) | D (°C) | E (°C) | F (s) |
|----------------------|----------------|--------|-------|--------|--------|-------|
| SPPB | 250 | 230 | 40 | 180 | 150 | 120 |
| SPVE | 260 | | 40 | | | |
| SPVL | | | | | | |
| SPVM | | | | | | |
| SPVN | | | | | | |
| SPVR | | | | | | |
| SPVS | | | | | | |
| SPVT | | | | | | |
| SSCM | | | | | | |
| SSCQ | | | | | | |
| SPVQC | 250 | | | | | |

Notes

1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, surface depending on the PC board's material, size, thickness, etc.
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.

Reference for Hand Soldering

| Series | Soldering temperature | Soldering time |
|--|-----------------------|----------------|
| SPVS, SPVN, SPVT, SPVM, SPVR, SPVE, SSCQ, SSCM, SPVL, SSCT, SPVQC | 350±5°C | 3s max. |
| SPVQ1, SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SSCN, SPVQA | 300±10°C | 3 + 1 / 0s |
| SPPB (Reflow) | 300±5°C | 5s max. |
| SSCF, SPPB (For Lead, Dip) | 350±10°C | 3 + 1 / 0s |

Reference for Dip Soldering (For PC board terminal types)

| Series | Items | | Dip soldering | |
|--|------------------------|-----------------|-----------------------|-----------------------|
| | Preheating temperature | Preheating time | Soldering temperature | Duration of immersion |
| SSCT, SPVQ1, SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SPVQA | 100±10°C | 60s max. | 260±5°C | 5±1s |
| SPPW8, SPPB | 100°C max. | 60s max. | 255±5°C | 5±1s |
| SSCF | — | | 260±5°C | 5±1s |