

Water Resist Detector Switch (Lever type)

SSCN Series

Supports detection in both the right/left directions to ensure a wide operating angle of 40 degrees on a side, which contributes to improved flexibility of the set design.

Power

Push

Slide

Rotary

Encoders

Detector

Dual-in-line
Package Type

Multi Control
Devices

TACT

Custom-
Products



Car Use

Features

- Detectable right and left directions.
- Long ON travel (single side : 30°) offers broader design flexibility around the set mechanism.
- Double surface sliding contacts for higher contact reliabilities.
- Meet specified IEC-IP67 water resist.

Applications

- Detection of mechanism operation in automobiles and surrounding wet areas

Typical Specifications

| Items | | Specifications |
|---|--------------|-------------------------------|
| Rating (max.) (Resistive load) | | 0.1A 12V DC |
| Contact resistance (Initial performance/After lifetime) | | 500mΩ max./1Ω max. |
| Operating force | | 2N max. |
| Lever deviated angle | | 40° |
| Operating life | Without load | 100,000 cycles |
| | With load | 1000,000 cycles (0.1A 12V DC) |

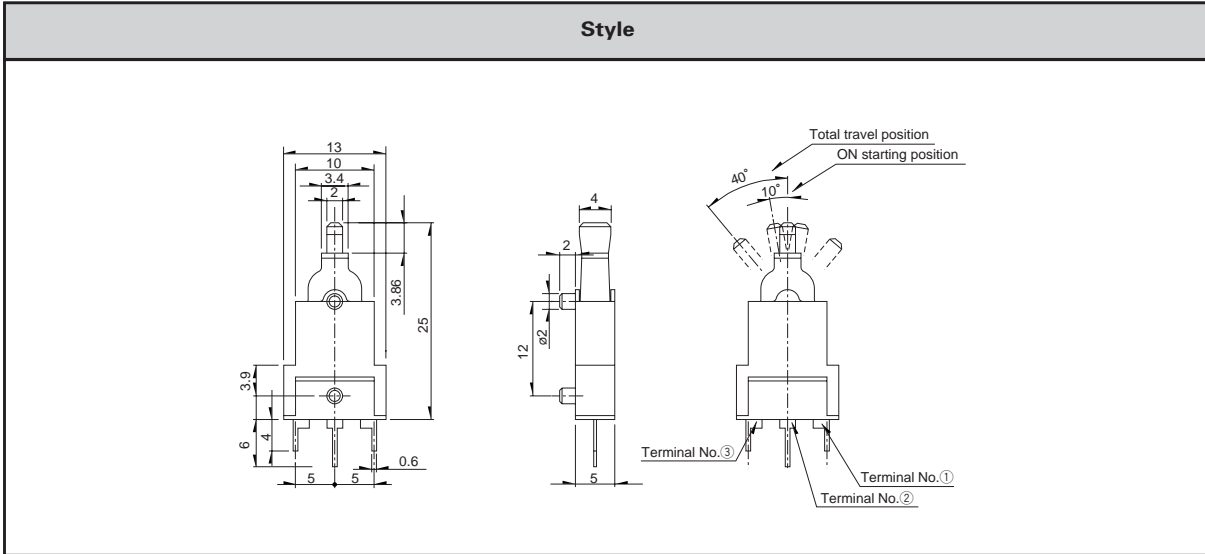
Products Line

| Poles | Positions | Changeover timing | Terminal style | Minimum packing unit (pcs.) | Products No. |
|-------|-----------|-------------------|----------------|-----------------------------|--------------|
| 1 | 2 | Non shorting | Printed | 60 | SSCN110101 |

For other detailed specifications, see P.304

Dimensions

Unit:mm



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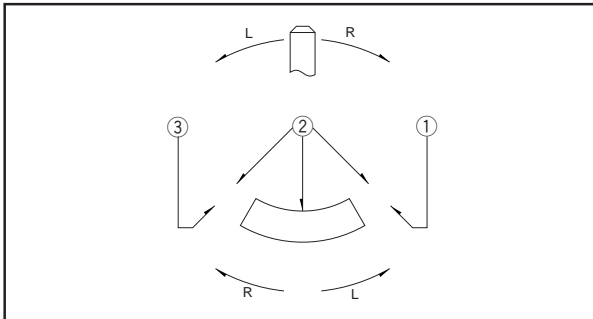
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Circuit Diagram

Unit:mm



Products Specifications

| Items | | Series | | | | | | | | | | |
|---------------------------|--------------------------------|--|--|---|---|--|---|---|--|---|---|---|
| | | SPVC1 | SPVF | SSCU | SSCT | SSCF | SSCN | SPVQ1 | SPVQ3 | SPVQ4 | SSCW | SREF |
| Power | Operating temperature range | -10°C to +60°C | | | | | -40°C to +85°C | | | | | -10°C to +60°C |
| | Rating (max.) (Resistive load) | 10mA 16V DC | 1mA 5V DC | 0.1A 12V DC | | | | | | | | 1mA 5V DC |
| Push | Electrical performance | Initial contact resistance | 1 Ω max. | 500mΩ max. | 70mΩ max. | 20mΩ max. | 100mΩ max. | 500mΩ max. | | | | 1 Ω max. |
| Slide | | Insulation resistance | 100MΩ min. 100V DC | | 100MΩ min. 250V DC | | 100MΩ min. 100V DC | 100MΩ min. 500V DC | | | 100MΩ min. 250V DC | 100MΩ min. 100V DC |
| Rotary | | Voltage proof | 100V AC for 1 min. | | 250V AC for 1 min. | | 100V AC for 1 min. | 500V AC for 1 min. | | | 250V AC for 1 min. | 100V AC for 1 min. |
| Encoders | Mechanical performance | Robustness of terminal | 3N for 1 min. | 3N for 30 s | 3N for 1 min. | | 5N for 1 min. | 3N for 1 min. | | | — | |
| Detector | | Robustness of actuator | 10N | 1N | 5N | 10N | | | 20N | | 5N | |
| Dual-in-line Package Type | | 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 | | | | | | | | | |
| Multi Control Devices | | Resistance to soldering heat | Manual soldering | 350±10°C, 3 ⁺¹ / ₀ s | 300±10°C, 3 ⁺¹ / ₀ s | 350±5°C, 3s max. | | 350±10°C, 3 ⁺¹ / ₀ s | 300±10°C, 3 ⁺¹ / ₀ s | | | — |
| TACT | | | Dip soldering | 260±5°C, 3s max. | 260±5°C, 5±1s | — | 260±5°C, 5±1s | | — | 260±5°C, 5±1s | | — |
| Custom-Products | Reflow soldering | | — | | | | | | | | | |
| Durability | Operating life without load | 25,000 cycles 2 Ω max. | 100,000 cycles 1 Ω max. | 10,000 cycles 100mΩ max. | 10,000 cycles 40mΩ max. | 50,000 cycles 200mΩ max. | 100,000 cycles 1 Ω max. | 300,000 cycles 1 Ω max. | 300,000 cycles or 1,000,000 cycles 1 Ω max. | 300,000 cycles 1 Ω max. | 100,000 cycles 1 Ω max. | 150,000 cycles 2 Ω max. |
| | Operating life with load | (10mA 16V DC) 25,000 cycles 2 Ω max. | (1mA 5V DC) 100,000 cycles 1 Ω max. | (0.1A 12V DC) 10,000 cycles 150mΩ max. | (0.1A 12V DC) 10,000 cycles 60mΩ max. | (0.1A 12V DC) 50,000 cycles 300mΩ max. | (0.1A 12V DC) 100,000 cycles 1 Ω max. | (0.1A 12V DC) 300,000 cycles 1 Ω max. | (0.1A 12V DC) 300,000 cycles or 1,000,000 cycles 1 Ω max. | (0.1A 12V DC) 300,000 cycles 1 Ω max. | (0.1A 12V DC) 100,000 cycles 1 Ω max. | (1mA 5V DC) 150,000 cycles 2 Ω max. |
| Environmental performance | Cold | -20±2°C for 96h | -40±2°C for 96h | -20±2°C for 96h | | | -40±2°C for 500h | | | | | -20±2°C for 96h |
| | Dry heat | 85±2°C for 96h | | | | | 85±2°C for 500h | | | | | 85±2°C for 96h |
| | Damp heat | 40±2°C, 90 to 95%RH for 96h | | | | | 60±2°C, 90 to 95%RH for 500h | | | | | 40±2°C, 90 to 95%RH for 96h |