

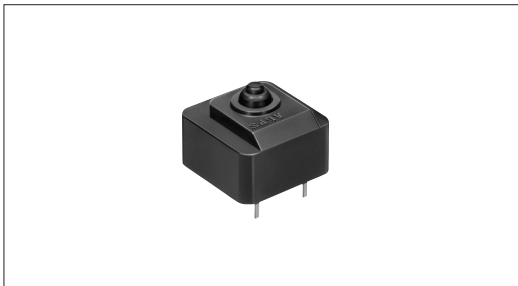
# Power Switch Water-proof Type (with Built-in Detector Switches)

SDKR Series



For power resume in main power auto shut down, compact and composite type suitable for AC and DC.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power**



### Ratings and Safety Standards

| Items   | Specifications                            |
|---|---|
| AC Switch   | 1A 125V AC, 0.5A 250V AC (Resistive load) |
| DC Switch   | 10mA 5V DC (Resistive load)               |
| Ratings satisfying local electrical appliance and material safety law | 1A 125V AC                                |

- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

### Product Line

| Circuit arrangement | Travel (mm) | Operating force | Mounting method | Minimum order unit (pcs.) | Product No. |
|---------------------|-------------|-----------------|-----------------|---------------------------|-------------|
| SPST                | 1.5         | 2.5 ± 1.5N      | PC board        | 3,000                     | SDKRA10100  |

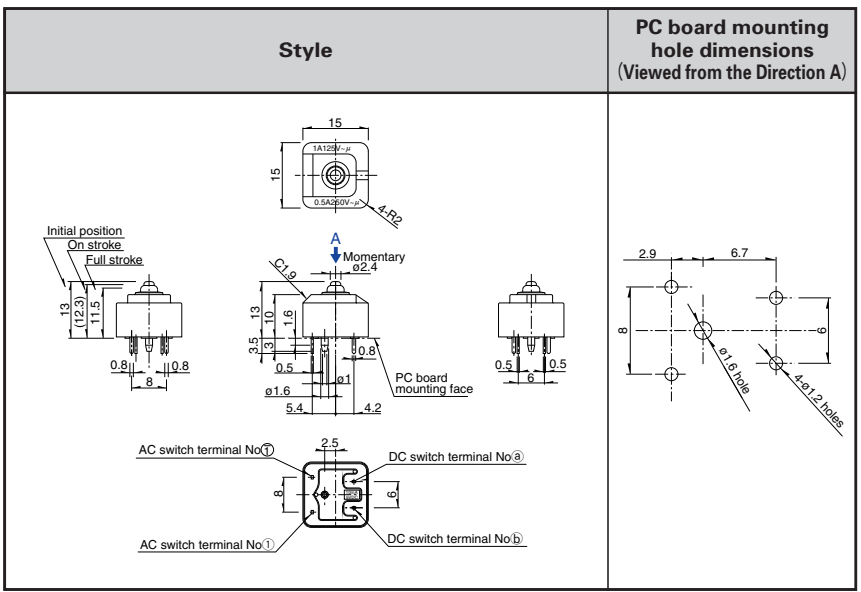
### Packing Specifications

| Number of packages (pcs.) |                        | Export package measurements (mm) |
|---------------------------|------------------------|----------------------------------|
| 1 case /Japan             | 1 case /export packing |                                  |
| 750                       | 3,000                  | 555 × 375 × 223                  |

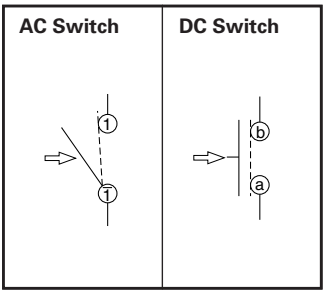
- Push Type**
- Rocker Type
- Slide Type
- Rotary Type

### Dimensions

Unit:mm







### Circuit Diagram (Viewed from Direction A)



### Notes

1. This product is not be used under water.
2. Depending on the loading conditions, Nitrogen Oxide (NO<sub>x</sub>) and moisture caused by opening/closing arc may generate nitric acid (HNO<sub>3</sub>). This can lead to corrosion of the metal inside causing functional failure. Please apply contact protection circuits (arc suppressing circuits) or an OFF stage arc reducing circuit method.
3. Please place purchase orders per minimum order unit N (integer).

## List of Varieties

| Items                     | Type                        | Push  |   | Rocker  |   |                             |                  |  |
|---------------------------|-----------------------------|---|---|---|---|-----------------------------|------------------|--|
|                           | Series                      | SDKN  | SDKR  | SDDJE ※1<br>※2  | SDDJF ※1<br>※2  |                             |                  |  |
| Detector                  | Photo                       |  |  |  |  |                             |                  |  |
| Push                      |                             |   |   |   |   |                             |                  |  |
| Slide                     | Travel (mm)                 | 9<br>9.7  | 1.5   | 3.5   | 5.2   |                             |                  |  |
| Rotary                    | Remark                      | —   | Water-proof type  | —   |   |                             |                  |  |
| Encoders                  | Operating temperature range | -20°C to +60°C  | -10°C to +85°C  | -10°C to +55°C  |   |                             |                  |  |
| Power                     | Automotive use              | —   | —   | ○   | ○   |                             |                  |  |
| Dual-in-line Package Type | Rating                      | 0.25A 250V AC<br>0.5A 125V AC<br>5mA 5V DC  | 0.5A 250V AC<br>1A 125V AC  | 10A 250V AC<br>6A/96A 250V~   | 16A 250V AC<br>16 (6)/250~  |                             |                  |  |
| TACT Switch™              | Electrical performance      | Contact resistance  |   |   |   | 100mΩ max.                  |                  |  |
| Custom-Products           |                             | Insulation resistance   |   |   |   | 500MΩ min. 500V DC          |                  |  |
|                           |                             | Voltage proof   |   | 1,000V AC for 1minute   |   | 2,000V AC for 1minute       |                  |  |
| Push Type                 | Mechanical performance      | Terminal strength   |   | 50N for 1minute   | 5N for 1minute  | 50N for 1minute             | 60N for 1minute  |  |
| Rocker Type               |                             | Actuator strength   | Operating direction   |   | 20N   | 100N                        | 25N              |  |
| Slide Type                |                             |   | Perpendicular direction   |   | 20N   |                             | 25N              |  |
| Rotary Type               |                             | Resistance to soldering heat  | Manual soldering  |   | —   | 300±10°C,<br>3±0.5s         | 350±10°C, 3±0.5s |  |
|                           | Dip soldering               |   | —   | 260±5°C,<br>10±1s   | ※260±10°C, 10±1s  |                             |                  |  |
|                           | Durability                  | Operating life  |   | 6,000cycles   | 100,000cycles   | 10,000cycles                |                  |  |
|                           |                             | Load : as ratings   |   | Refer to individual product spec.   |   | Load : as ratings           |                  |  |
|                           | Environmental performance   | Cold  |   | -30±2°C for 96h   | -20±2°C for 240h  | -20±2°C for 96h             |                  |  |
|                           |                             | Dry heat  |   | 85±2°C for 96h  |   | 85±2°C for 96h              |                  |  |
|                           |                             | Damp heat   |   | 40±2°C,<br>90 to 95%RH for 96h  | 60±2°C,<br>90 to 95%RH for 1000h  | 40±2°C, 90 to 95%RH for 96h |                  |  |
|                           | Page                        | 249   | 251   | 252   | 256   |                             |                  |  |

- Power Switches Cautions .....264
- Power Switches Safety Standard .....265, 266, 267

### Notes

- ※1. Dip soldering can be used on SDDJE For PC board terminal and SDDJF right angle terminal types only.
- ※2. The operating temperature range for automotive applications can be raised upon request. Please contact us for details.
- marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C.