

### Ratings and Safety Standards

| Items              | Specifications                 |
|--------------------|--------------------------------|
| Rating (max.)      | 4.5A 12V DC (lamp load: 27W×2) |
| Rating (min.)      | 10mA 12V DC (Resistive load)   |
| Contact resistance | 500mΩ max.                     |
| Operating force    | 4.6N max.                      |
| Operating life     | 100,000 cycles                 |

### Product Line

| Type | Circuit arrangement    | Travel (mm) | Mounting method | Terminal configuration | Minimum order unit (pcs.) |        | Product No.       |
|------|------------------------|-------------|-----------------|------------------------|---------------------------|--------|-------------------|
|      |                        |             |                 |                        | Japan                     | Export |                   |
| Push | SPST<br>(Normal Close) | 3.7         | Snap-in         | Tab Terminal<br>(#187) | 180                       | 360    | <b>SDDHA10100</b> |

### Packing Specifications

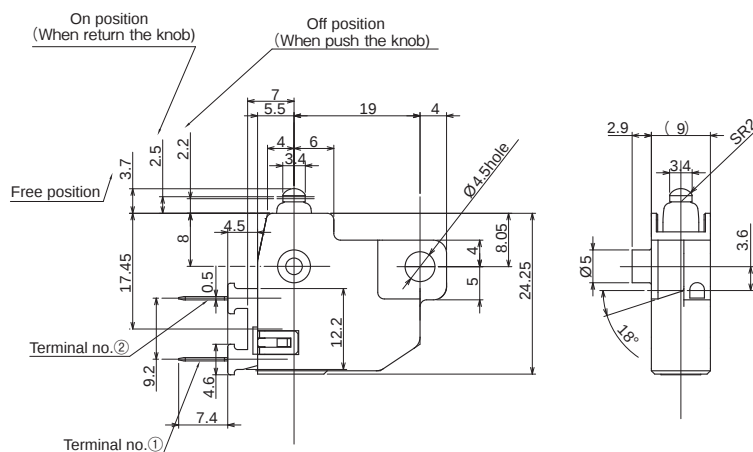
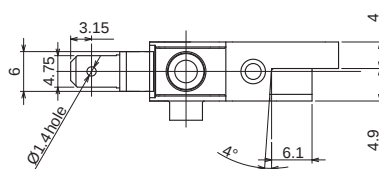
Tray

| Number of packages (pcs.) |                        | Export package measurements (mm) |
|---------------------------|------------------------|----------------------------------|
| 1 case /Japan             | 1 case /export packing |                                  |
| 180                       | 360                    | 400×270×185                      |

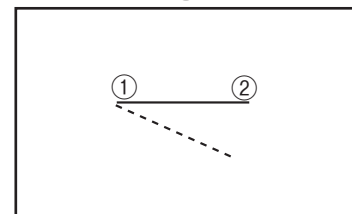
### Dimensions

Unit:mm

| Style |
|-------|
|-------|



### Circuit Diagram



# Power Switches

## List of Varieties

| Type                        |                       | Push                                                                              |                                                                                                    | Rocker                                                                              | Rotary                                                                              |                                                                                                       |
|-----------------------------|-----------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Series                      |                       | SDKR                                                                              | SDDH                                                                                               | SDDJE ※ 1<br>※ 2                                                                    | SDDE                                                                                |                                                                                                       |
| Photo                       |                       |  |                   |   |  |                                                                                                       |
| Rating                      |                       | 0.5A 250V AC<br>1A 125V AC<br>10mA 5V DC                                          | Rating (max.): 4.5A 12V DC<br>(Lamp load: 27W×2)<br>Rating (min.): 10mA 12V DC<br>(Resistive load) | 10AGP 250V AC<br>6A / 96A 250V~                                                     | AC Switch: 1A / 16A 250V ~<br>DC Switch: 20mA 12V DC<br>Encoders: 0.1A 12V DC       |                                                                                                       |
| Operating life              |                       | 100,000cycles                                                                     | 100,000 cycles                                                                                     | 10,000cycles                                                                        | AC Switch: 10,000 cycles<br>DC Switch: 10,000 cycles                                |                                                                                                       |
|                             |                       | 0.5A 250V AC                                                                      |                                                                                                    | 10A 250V AC                                                                         | Encoder<br>30,000 cycles                                                            |                                                                                                       |
| Travel (mm)                 |                       | 1.5                                                                               | 3.7                                                                                                | 3.4                                                                                 | Push Switches: 1.85mm<br>Encoders: 360° (360° Rotation)                             |                                                                                                       |
| Features                    |                       | Water-proof type<br>With signal circuit                                           | Water-proof<br>(IP68 rating)                                                                       | —                                                                                   | AC Switch, DC Switch,<br>With Encoder                                               |                                                                                                       |
| Operating temperature range |                       | −10℃ to +85℃                                                                      | −15℃ to+80℃                                                                                        | −10℃ to +55℃                                                                        | 0℃ to +85℃                                                                          |                                                                                                       |
| Automotive use              |                       | —                                                                                 |                   | —                                                                                   | —                                                                                   |                                                                                                       |
| Life cycle (availability)   |                       |  |                   |  |  |                                                                                                       |
| Electrical performance      | Contact resistance    |                                                                                   | 100mΩ max. ( AC switch)<br>500mΩ max. (DC switch)                                                  | 500mΩ max.                                                                          | 100mΩ max.                                                                          | AC Switch: 100mΩ max.<br>DC Switch: 500mΩ max.<br>Encoder: 1Ω max.                                    |
|                             | Insulation resistance |                                                                                   | 500MΩ min. 500V DC<br>(AC switch)<br>100MΩ min. 100V DC<br>(DC switch)                             | 10MΩ min. 500V DC                                                                   | 500MΩ min. 500V DC                                                                  | AC Switch: 100MΩ min. 500V DC<br>DC Switch: 100MΩ min. 100V DC<br>Encoder: 100MΩ min. 100V DC         |
|                             | Voltage proof         |                                                                                   | 1000V AC for 1minute<br>(AC switch)<br>100V AC for 1minute<br>(DC switch)                          | 500V AC for 1minute                                                                 | 2,000V AC for 1minute                                                               | AC Switch: 2,000V AC for 1 minute<br>DC Switch: 100V AC for 1 minute<br>Encoder: 100V AC for 1 minute |
| Mechanical performance      | Terminal strength     |                                                                                   | 5N for 1minute                                                                                     | Slider pull-out strength:<br>100N min.                                              | 50N for 1minute<br>(Lead terminal)<br>5N for 1minute<br>(Right-angle terminal)      | AC Switch: 5N for 1 minute<br>DC Switch: 5N for 30s<br>Encoder: 5N for 1 minute                       |
|                             | Actuator strength     | Operating direction                                                               | 100N                                                                                               | —                                                                                   | 25N                                                                                 | 100N                                                                                                  |
|                             |                       | Perpendicular direction                                                           | 20N                                                                                                | —                                                                                   | 25N                                                                                 | 30N<br>(Retract direction)                                                                            |
| Environmental performance   | Cold                  |                                                                                   | −20℃ 240h                                                                                          | −15℃ 96h                                                                            | −20℃ 96h                                                                            | −40℃ 240h                                                                                             |
|                             | Dry heat              |                                                                                   | 85℃ 240h                                                                                           | 80℃ 96h                                                                             | 85℃ 96h                                                                             | 85℃ 240h                                                                                              |
|                             | Damp heat             |                                                                                   | 60℃, 90 to 95%RH<br>1000h                                                                          | 40℃, 90 to 95%RH 96h                                                                |                                                                                     | 40℃, 90 to 95%RH 240h                                                                                 |
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|                                     |     |
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### 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 can be raised upon request. Please contact us for details.
- Indicates applicability to all products in the series.

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