Slim Type Single Pole Rocker Type

Industry’s thinnest with a 5.2mm body width

- Ratings and Safety Standards

<table>
<thead>
<tr>
<th>Items</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEC(SEMKO)</td>
<td>10(6) / 250〜8A / 128A250V〜</td>
</tr>
</tbody>
</table>

- Product Line

<table>
<thead>
<tr>
<th>Circuit arrangement</th>
<th>Travel (mm)</th>
<th>Operating force</th>
<th>Mounting method</th>
<th>Terminal configuration</th>
<th>Marking (Knob)</th>
<th>Minimum order unit (pcs.)</th>
<th>Product No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPST</td>
<td>4.6</td>
<td>3±2N</td>
<td>Snap-in</td>
<td>For Lead</td>
<td>without</td>
<td>150</td>
<td>SDDJF1A100</td>
</tr>
</tbody>
</table>

- Packing Specifications

<table>
<thead>
<tr>
<th>Number of packages (pcs.)</th>
<th>Export package measurements (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 case /Japan</td>
<td>400×270×290</td>
</tr>
<tr>
<td>1 case /export packing</td>
<td>750</td>
</tr>
</tbody>
</table>

- Dimensions

<table>
<thead>
<tr>
<th>Style (ON position)</th>
</tr>
</thead>
</table>

- Circuit Diagram

Refer to P.168 for soldering conditions.
<table>
<thead>
<tr>
<th>Type</th>
<th>Rocker</th>
<th>Slide</th>
<th>Rotary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>SDDJF1A</td>
<td>SDKP</td>
<td>SDKZ</td>
<td>SDDE</td>
</tr>
<tr>
<td>Photo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rating</td>
<td>8A / 128A 250V<del>10 (6) / 250</del></td>
<td>5RA 250V AC</td>
<td>PS: 16 (6) A 250V AC</td>
<td>AC Switch: 1A / 16A 250V ~ DC Switch: 20mA 12V DC</td>
</tr>
<tr>
<td>DC: 0.1A 12V DC</td>
<td>Encoders: 0.1A 12V DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating life</td>
<td>10,000cycles</td>
<td>100cycles</td>
<td>10,000cycles (Power)</td>
<td>AC Switch: 10,000 cycles DC Switch: 10,000 cycles</td>
</tr>
<tr>
<td>DC: 0.01mA (Encoder)</td>
<td>DC Switch: 0.01mA (Encoder)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel (mm)</td>
<td>4.6</td>
<td>6</td>
<td></td>
<td>Endless</td>
</tr>
<tr>
<td>Features</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>AC Switch, DC Switch, With Encoder</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>−10°C to +55°C</td>
<td>−10°C to +60°C</td>
<td>−10°C to +70°C</td>
<td>0°C to +85°C</td>
</tr>
<tr>
<td>Automotive use</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Life cycle (availability)</td>
<td></td>
<td>⭐⭐⭐</td>
<td>⭐⭐⭐</td>
<td>⭐⭐⭐</td>
</tr>
</tbody>
</table>

**Electrical performance**
- Contact resistance: 100mΩ max. (Power)
- Insulation resistance: 500MΩ min. 500V DC
- Voltage proof: 2000V AC for 1 minute
- Terminal strength: 50N for 1 minute
- Operating direction: 25N
- Perpendicular direction: 25N
- Actuator strength: 50N
- Operating direction: 50N
- Perpendicular direction: 50N
- Contact resistance: 100mΩ max.
- Insulation resistance: 500MΩ min. 500V DC
- Voltage proof: 2000V AC for 1 minute
- Terminal strength: 10N for 1 minute
- Operating direction: 1ON
- Perpendicular direction: 1ON
- Actuator strength: 20N (Power)
- Operating direction: 20N
- Perpendicular direction: 20N
- Contact resistance: 100mΩ max.
- Insulation resistance: 500MΩ min. 500V DC
- Voltage proof: 2000V AC for 1 minute
- Terminal strength: 2ON
- Operating direction: 2ON
- Perpendicular direction: 2ON
- Actuator strength: 100N
- Operating direction: 100N
- Perpendicular direction: 100N

**Mechanical performance**
- Terminal strength: 10N for 1 minute
- Operating direction: 50N
- Perpendicular direction: 50N
- Actuator strength: 30N
- Operating direction: 30N
- Perpendicular direction: 30N

**Environmental performance**
- Cold: −20°C 96h
- Dry heat: 85°C 96h
- Damp heat: 40°C, 90 to 95%RH 96h

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Reference for Hand Soldering

<table>
<thead>
<tr>
<th>Series</th>
<th>Soldering temperature</th>
<th>Soldering time</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDDJE, SDDJF, SDKP, SDDJF1A, SDKZ, SDDE</td>
<td>350±10℃</td>
<td>3±1/0s</td>
</tr>
<tr>
<td>SDKR</td>
<td>300±10℃</td>
<td>3±0.5s</td>
</tr>
</tbody>
</table>

Reference for Dip Soldering

(For PC board terminal types and SDDJF right-angle terminal types)

<table>
<thead>
<tr>
<th>Series</th>
<th>Soldering temperature</th>
<th>Duration of immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDKR, SDDJE, SDDJF, SDKP, SDKZ, SDDE</td>
<td>260±5℃</td>
<td>10±1s</td>
</tr>
</tbody>
</table>

Power Switches / Cautions

1. The primary power supply switching is subject to the safety regulations, and the provisions differ by each destination. Consult with us for non-standard use cases.
2. An unstable contact may occur if the switch current is lower than 0.5A. For this case, consult with us.
3. These power switches were produced for alternating current. For direct current, consult with us.
4. Applying load to terminals during soldering under certain conditions may cause deformation and electrical property degradation.
5. Avoid use of water-soluble soldering flux, since it may corrode the switches.
6. When soldering twice, wait until the first soldered portion cools to normal temperature. Continuous heating will deform the external portions, loosen or dislodge terminals, or may deteriorate their electrical characteristics.
7. Before soldering switches with locking mechanism, release the locks. If they are soldered without releasing the locks, the soldering heat may deform the locking mechanism.
8. Be sure to release the locks before removing the knobs. Otherwise, the locking mechanism may be broken.
9. Be sure to use the switch with forced travel positioned as close to the total travel as possible.
10. Tighten the mounting screws by applying the specified torque. Tightening with a larger torque than the specified will result in malfunction or breakage of screws.
11. Corrosive gas if generated by peripheral parts of a set, malfunction such as imperfect contact may occur. Thorough investigation shall be required beforehand.
12. Storage
   Store the products as delivered at normal temperature and humidity, out of direct sunlight and away from corrosive gases. Use them as soon as possible and no later than six months after delivery. Once the seal is broken, use them as soon as possible.

Power Switches / Safety Standards

1. Safety Standards Outline
   Safety standards are established by a country or an organization representing it to protect general users from electrical shock and fire hazards. It establishes standards for electrical devices and components. For electrical equipment manufacturers, utilizing switches that have been safety-approved ensures the safety of the switch. The use of a safety-approved switch also simplifies at least one part of the process of obtaining certification by safety testing.

2. Major Safety Standards
   (1) Electrical Appliance and Material Safety Law
       The conventional [Electrical Appliance and Material Control Law] has changed to [Electrical Appliance and Material Safety Law] and has been enforced since April 1, 2001. Electrical appliances are categorized into special electric appliances and parts (formerly Class A) and Electrical appliances other than the special electric appliances (formerly Class B). Special electric appliances are required to receive goodness of fit test at a certified test agency and to store the certificate. Also, penal provisions have been reinforced.

   (2) UL (Underwriters Laboratories Inc.)
       Underwriters Laboratories Inc. (UL) is the American safety approving organization. Its purpose is to ensure consumer safety and protect them from fire hazards. State law requires that equipment to be exported to the United States utilize UL approved power switches or power switches meeting UL standards and capable of passing UL tests.