











■ List of Varieties

Type		Rocker	Slide		Rotary	
Series		SDDJF1A	SDKP	SDKT	SDKZ	SDDE
Photo						
Rating		8A / 128A 250V~ 10(6) / 250~	5A 250V AC	6A 125V AC	PS:16 (6) A 250V AC 14 (6) A 250V AC DC:0.1A 12V DC	AC Switch : 1A / 16A 250V ~ DC Switch : 20mA 12V DC Encoders: 0.1A 12V DC
Operating life		10,000cycles 10A 250V AC	1,000cycles Without load	20,000cycles 6A 125V AC	10,000cycles (Power) 30,000cycles (Encoder) 16A 250V AC (Power) 0.1A 12V DC (Encoder)	AC Switch : 10,000 cycles DC Switch : 10,000 cycles Encoder 30,000 cycles
Travel (mm)		4.6	6	2.2	Endless	Push Switches: 1.85mm Encoders: 360° (360° Rotation)
Features		—	—	—	With Encoders circuit	ACSwitch , DCswitch , With Encoder
Operating temperature range		-10°C to +55°C	-10°C to +60°C		-10°C to +70°C	0°C to +85°C
Automotive use		○	—	—	—	—
Life cycle (availability)						
Electrical performance	Contact resistance	100mΩ max.		10mΩ max.	100mΩ max. (Power) 1Ω max. (Encoder)	AC Switch : 100mΩ max. DC Switch : 500mΩ max. Encode: 1Ω max.
	Insulation resistance	500MΩ min. 500V DC		1,000MΩ min. 500V DC	500MΩ min. 500V DC (Power) 100MΩ min. 100V DC (Encoder)	AC Switch : 100MΩ min. 500V DC DC Switch : 100MΩ min. 100V DC Encoder: 100MΩ min. 100V DC
	Voltage proof	2,000V AC for 1minute		1,000V AC for 1minute	2,000V AC for 1minute (Power) 100V AC for 1minute (Encoder)	AC Switch: 2,000V AC for 1minute DC Switch: 100V AC for 1minute Encode: 100V AC for 1minute
Mechanical performance	Terminal strength	50N for 1minute	10N for 1minute		20N (Power) 5N (Encoder)	AC Switch: 5N for 1 minute DC Switch: 5N for 30s Encode: 5N for 1 minute
	Actuator strength	Operating direction	25N	50N	30N	—
Perpendicular direction		25N	50N	10N	30N	30N (retract direction)
Environmental performance	Cold	-20±2°C for 96h			-40±2°C for 240h	
	Dry heat	85±2°C for 96h			85±2°C for 240h	
	Damp heat	40±2°C, 90to95%RH for 96h			40±2°C, 90to95%RH for 240h	
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Note ○ indicates applicability to some products in the series.

Detector

Slide

Push

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Push
Type

Rocker
Type

Slide
Type

Rotary
Type

Power Switches Soldering Conditions

Reference for Hand Soldering

Series	Soldering temperature	Soldering time
SDDJE, SDDJF, SDKP, SDDJF1A, SDKZ, SDDE	350±10℃	3+1 / 0s
SDKT	350±10℃	3±0.5s
SDKR	300±10℃	3±0.5s

Reference for Dip Soldering

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

Series	Dip soldering	
	Soldering temperature	Duration of immersion
SDKR, SDDJE, SDDJF, SDKP, SDKT, SDKZ, SDDE	260±5℃	10±1s

Power Switches Cautions

- 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.
- An unstable contact may occur if the switch current is lower than 0.5A. For this case, consult with us.
- These power switches were produced for alternating current. For direct current, consult with us.
- Applying load to terminals during soldering under certain conditions may cause deformation and electrical property degradation.
- Avoid use of water-soluble soldering flux, since it may corrode the switches.
- 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.
- 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.
- Be sure to release the locks before removing the knobs. Otherwise, the locking mechanism may be broken.
- Be sure to use the switch with forced travel positioned as close to the total travel as possible.
- 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.
- Corrosive gas if generated by peripheral parts of a set, malfunction such as imperfect contact may occur. Thorough investigation shall be required beforehand.
- Storage
 - Store the products as delivered, at a normal temperature and humidity, without direct sunshine and corrosive gas ambient. Use them at an earliest possible timing, not later than six months upon receipt.
 - After breaking the seal, keep the products in a plastic bag to shut out ambient air, store them in the same environment as above, and use them up as soon as possible.
 - Do not stack too many switches.

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.

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