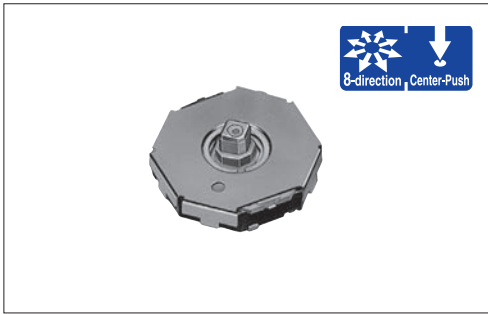


8-direction center push type switch in 2.3mm low-profile design



### Typical Specifications



Items		Specifications
Rating (max.) (Resistive load)		10mA 5V DC
Switch ON position (8-direction)		Each direction 7° max.
Travel (Center-push)		0.3±0.2mm
Operating life	8-direction	Each direction 500,000 cycles
	Center-push	500,000 cycles

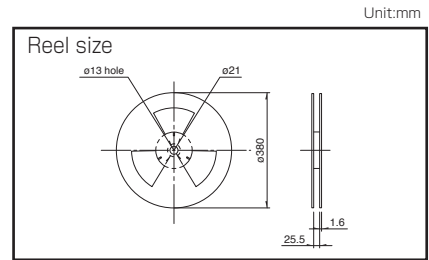
### Product Line

Product No.	Maximum resolution	Operating force (N)		Minimum order unit (pcs.)	
		Direction	Center-push	Japan	Export
<b>RKJXS1004001</b>	8-direction	0.8±0.5	2.5±1.5	3,800	3,800

### Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements(mm)
1 reel	1 case / Japan	1 case / export packing		
950	3,800	3,800	24	405×405×162



### Dimensions

Style	PC board mounting hole dimensions (Viewed from mounting side)
	<p>A slant line part hoes the solder land</p>

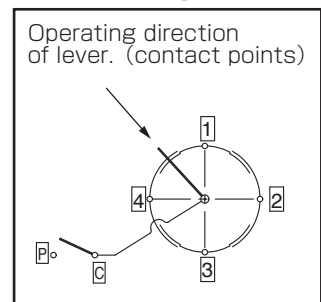
### Output Relation Chart Between Lever Position and ON Position.

Term.	1	2	3	4	C	P	E
a	△	△	●	△	●	●	○
b	△	△	△	●	●	●	○
c	△	△	△	●	●	●	○
d	●	△	△	△	●	●	○
e	●	△	△	△	●	●	○
f	●	●	△	△	●	●	○
g	△	△	△	△	●	●	○
h	△	△	●	△	●	●	○
Center Push	△	△	△	△	●	●	○
Free	○	○	○	○	○	△	○









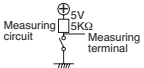
● : ON  
 △ : OFF  
 ○ : Not specified  
 ※ Term. E : Ground terminal

Operating direction of lever.

### Circuit Diagram



Multi Control Devices Variable Resistor Type Switch Type

Type		Switch type					
Series		RKJXL	RKJXS	SKRV	SKRH		
					SKRHAA/AB	SKRHAC/AD	
Photo							
Dimensions (typical value) (mm)	W	13	11.7	6.45	7.35/7.45		
	D			6.4	7.5		
	H	6.4	2.3	4	5		
Number of operating shafts		Single-shaft					
Shaft material		Metal	Resin				
Directional resolution		8-direction			4-direction		
Directional operating feeling (tactile feeling)		Without	With				
Lever return mechanism		With					
Center-push switch		With					
Encoder		Without					
Operating temperature range		-30°C to +70°C	-20°C to +70°C			-40°C to +85°C	
Operating life	Directional operation	total with 8-direction 100,000 cycles	500,000 cycles for each direction	200,000 cycles for each direction	200,000 cycles for each direction	1,000,000 cycles for each direction	
	Center-push	100,000 cycles	500,000 cycles	200,000 cycles	200,000 cycles	1,000,000 cycles	
	Encoder	—	—	—	—		
Automotive use		●	—	—	—		
Life cycle (availability)							
Rating (max.) (Resistive load)		10mA 5V DC			50mA 12V DC		
Electrical performance	Output voltage	—	 1V max. at 1mA 5V DC (Resistive load)	—	—		
	Encoder resolution	—	—	—	—		
	Insulation resistance	100MΩ min. 250V DC	50MΩ min. 50V DC	100MΩ min. 100V DC			
	Voltage proof	300V AC for 1min. or 360V AC for 2s	50V AC for 1min. or 60V AC for 2s	100V AC for 1min.			
Mechanical performance	Directional operating force	10±7mN·m	0.8±0.5N	1.2±0.6N	1.23±0.69N	1.2±0.69N	
	Push operating force	4.5±1N	2.5±1.5N	2.4±0.69N	2.35±0.69N		
	Encoder detent torque	—	—	—	—		
	Terminal strength	—	—	—	—		
	Actuator strength	100N (Push), 50N (Pull)	30N (Push), 10N (Pull)	—	—		
Environmental performance	Cold	-40°C 500h	-40°C 96h	-30°C 96h	-40°C 96h		
	Dry heat	85°C 500h	85°C 96h	80°C 96h	90°C 96h		
	Damp heat	60°C, 90 to 95%RH 500h	60°C, 90 to 95%RH 96h				
Page		451	452	453	454		

Switch Type Multi Control Devices Soldering Conditions . . . . . 461  
 Switch Type Multi Control Devices Cautions . . . . . 462

**Note** ● Indicates applicability to all products in the series.

# Switch Type / Soldering Conditions

## Reference for Manual Soldering

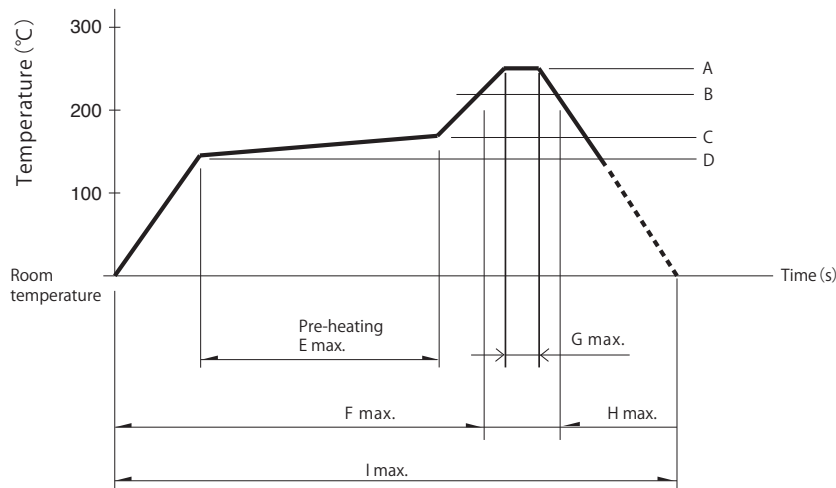
Series	Tip temperature	Soldering time	No. of solders
<b>RKJXT1F, RKJXM, RKJXL, SLLB, SLLB5, SRBE, SKRV, SKRH</b>	350±5℃	3s max.	1 time
<b>RKJXS</b>	350±10℃	3 <sup>+1</sup> <sub>-0</sub> s	2 time max.

## Reference for Dip Soldering

Series	Preheating		Dip soldering		No. of solders
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
<b>RKJXT1F, RKJXM</b>	100℃ max.	2 min. max.	260±5℃	5±1s	2 time max.
<b>RKJXL</b>	120℃ max.	70s max.	260℃ max.	6s max.	2 time max.

## Example of Reflow Soldering Condition

Temperature profile



Series	A	B	C	D	E	F	G	H	I	No. of reflows
<b>RKJXS</b>	260℃	230℃	150℃	150℃	2 min.	—	10s	40s	4 min.	1 time
<b>SLLB5</b>	250℃	230℃	150℃	150℃	—	2 min.	—	30s	—	1 time
<b>SKRV, SKRH, SLLB, SRBE</b>	260℃	230℃	180℃	150℃	2 min.	—	—	40s	—	1 time

### Notes

- The above temperature shall be measured on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the material, size thickness of PC boards and others. The above-stated conditions shall also apply to switch surface temperatures.
- Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.