## Compact two-way input device approximately 50% smaller than our conventional models



#### ■ Typical Specifications

Items		Specifications		
Rating (max.)/(min.) (Resistive load)		10mA 5V DC/50μA 3V DC		
Contact resistance	ce	1Ω max.		
Operating force	Lever portion	0.65±0.3N		
	Push portion	2.5±1N		
Travel (Push operation)		0.7mm		
Operating life	Without load	100,000 cycles		
Operating life	With load	100,000 cycles (10mA 5V DC)		

#### Product Line

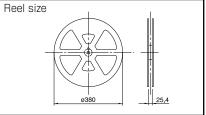
Product No.	Actuator configuration	Push-on switch	Location lug	Minimum order unit (pcs.)  Japan Export		Drawing No.
SLLB510100	Mounting knob		With			1
SLLB510200	integrated	NAC-AL-	Without	1.500	6,000	
SLLB520100	Mounting knob	- With	With	1,500		2
SLLB520200	Mounting knob		Without			

#### Packing Specifications

#### Taping

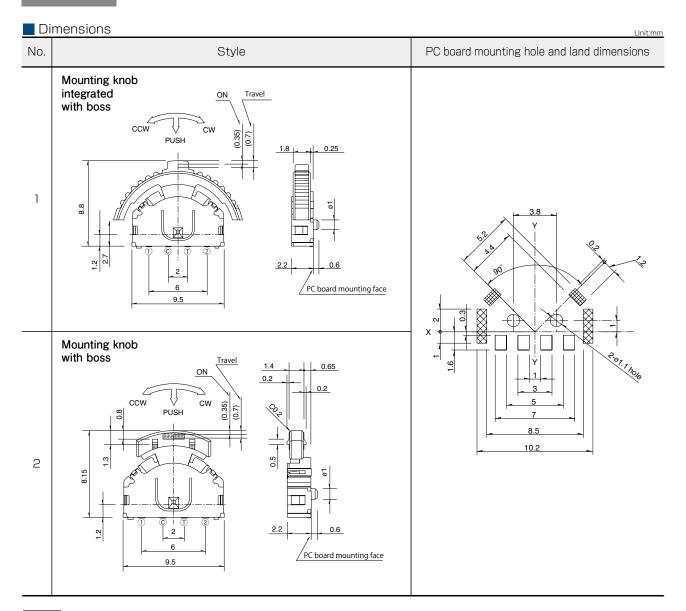
Numb	er of packages	Tape width	Export package	
1 reel	1 case / Japan 1 case / export packing		(mm)	measurements (mm)
1,500	3,000	6,000	24	428×413×172

Unit:mm



#### Note

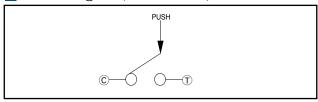
For automotive use, please contact us.

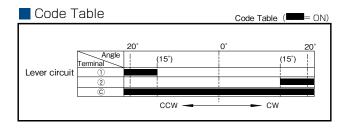


#### Note

Dimensions drawing is for type with location lugs.

### Circuit Diagram (Push Portion)





	Type Switch type								
5	Series SRBE		SRBE	SLLB5 Small type	SLLB				
Photo									
Dimonoiono	V	/	_	9.5	11.8				
(typical value	Dimensions typical value) D		_	- 8.8					
(mm)	F	1	_	2.2	3				
Number of	operating sh	nafts		Single-shaft					
Shaf	t material			Resin					
Direction	nal resolut	tion	_	2-dir	ection				
Directional (tact	operating f ile feeling)	eeling	With	Wit	hout				
Lever ret	urn mechani	sm	Without	W	/ith				
Center-	push swit	ch		With					
Е	ncoder		With	With Without					
Operating temperature range		-	-10°C to +60°C						
Operating Operating life without load			100,000 cycles						
life Operating life with load (at max. rated load)		with load ed load)	_	— 100,000 cycles					
Autor	Automotive use —		_	_	_				
Life cycl	e (availabi	lity)	<b>*</b> 3	*3	*3				
Rating (ma	x.) (Resistive	load)	1mA 5V DC	10mA	.5V DC				
Electrical	Output vo	oltage	1V max. at 1mA 5V DC (Resistive load)	-	1V max. at 1mA 5V DC Measuring SK Measurin terminal				
performance	Encoder res	olution	6 pluses/360°		_				
	Insulation res	istance	10MΩ min. 50V DC	100MΩ m	in. 100V DC				
	Voltage	proof	50V AC for 1min.	100V A0	C for 1min.				
	Push operatir	ng force	=	0.65	±0.3N				
	Encoder deten	t torque	3.5±1.5N	2.5±1N	2±1N				
Mechanical	Terminal st	rength	3±2mN⋅m	_	_				
performance Terminal strength			_	— 3N for 1min.					
Actuator Push / pull directions				50N					
		Operating direction	_		)N				
Environmental	Colo		-30°C 96h -20°C 96h		-40℃ 96h				
performance _	Dry heat 85°C 96h								
	Damp h	neat		40°C, 90 to 95%RH 96h					
Page 445 447 449				449					

# Switch Type / Soldering Conditions

#### Reference for Manual Soldering

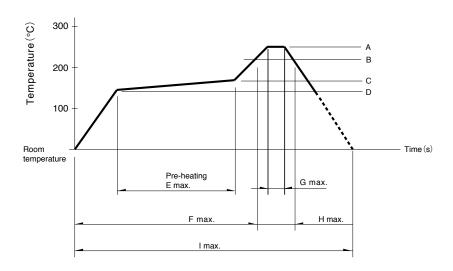
Series	Tip temperature	Soldering time	No. of solders	
RKJXT1F, RKJXM, RKJXL, SLLB, SLLB5, SRBE, SKRH	350±5℃	3s max.	1 time	
RKJXS	<b>(JXS</b> 350±10℃		2 time max.	

#### Reference for Dip Soldering

Series	Prehe	ating	Dip so	No. of solders	
Jelles	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	No. or soluers
RKJXT1F, RKJXM	100°C max.	2 min. max.	260±5℃	5±1s	2 time max.
RKJXL	120°C max.	70s max.	260°C max.	6s max.	2 time max.

#### Example of Reflow Soldering Condition

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple  $\phi$ 0.1 to 0.2 CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.
- 3. Temperature profile



Series	А	В	С	D	Е	F	G	Н	I	No. of reflows
RKJXS	260℃	230℃	150℃	150℃	2 min.	-	10s	40s	4 min.	1 time
SLLB5	250℃	230℃	150℃	150℃	_	2 min.	_	30s	_	1 time
SKRH, SLLB, SRBE	260℃	230℃	180℃	150℃	2 min.	_	_	40s	_	1 time

#### Notes

- 1. 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.
- 2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

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