8-directional Stick Switch (with Center-push Function)

RKJXS Series



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



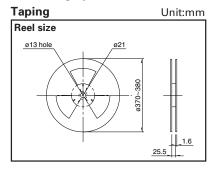
Typical Specifications Items **Specifications Swich ON position** 7° max. **Operating force** 0.8±0.5N **Push operating force** $2.5 \pm 1.5N$ Travel (Push operation) 0.3±0.2mm **Push strength** 30N Rating (max.) (Resistive load) 10mA 5V DC **Operating life** Each direction 500,000cycles Insulation resistance $50M\,\Omega$ min. 50V DC Voltage proof 50V AC for 1minute

Multi Control Devices

Product Line

Maximum resolution	Operati	ng force	Minimum order unit	Product No.	
waxiiiiuiii resolutioii	Direction (N)	Center-push (N)	(pcs.)		
8-direction	0.8±0.5	2.5±1.5	3,800	RKJXS1004001	

Packing Specifications



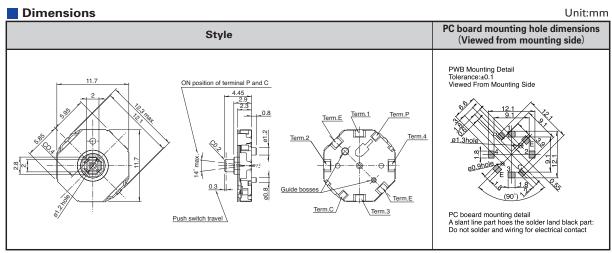
Numbe	er of packages	Tape width	Export package measurements	
1 reel 1 case /Japan /ex		1 case (mm) /export packing		(mm)
950	3,800	3,800	24	405×405×162

Variable Resistor Type

Switch Type

Note

Please place purchase orders for taping products per minimum order unit (1 reel or 1 case).



Refer to P.495 for soldering conditions.

List of Varieties

Series Items		eries	Switch type							
			RKJXT1F	RKJXM RKJXL		RKJXS	SKRV	SKRV SKRHAA, SKRHAB		
Photo		•								
Function		on	4-direction Encoder & Push	8-direction Encoder & Push	8-direction Center-Push	8-direction Center-Push	4-direction Center-Push		4-direction Center-Push	
Dime	nsions W		17	20.5	13	11.7	6.45	7.35/		
	al value) nm)	D					6.4	7.		
(11		H	10.5	5.45	6.4	2.3	4	5	•	
		perating shafts	Single-shaft	Single-shaft/Dual-shaft Metal		Single	e-snaπ Resin			
spo	Shaft material Directional resolution		4-direction	Ivietai	8-direction		4-direction			
ecif O	Directional resolution Directional operating feeling			:41-						
Outlined specifica-tions	(tactle f		VV	ith	Without		With			
iti @	Lever return				W	ith				
ns		r-push itch			W	ith				
	Enco	oder	With	Without/With		With	nout			
Operating temperature range			−40°C to	o +85°C	-30°C to +70°C	–20°C to	-20°C to +70°C			
Automotive use			0	0	0	_				
Rating (max.) (Resistive load)				10mA	5V DC		50mA 12V DC			
Electrical performance		tput tage	_			Measuring SKQ circuit Measuring terminal mill. 1V max. at 1mA 5V DC (Resistive load)				
ä	Directiona	l resolution	4-direction	4-direction 8-direction			4-direction			
per	Insulation	resistance		00MΩ min. 250V D		50MΩ min. 50V DC	100MΩ min. 100V DC			
for	Voltag	e proof	300V AC	for 1min. or 360V	AC for 2s 50V AC for 1min.		100V AC for 1min.			
mance		tional ng force	40±25mN∙m	Direction A, B, C, D 30±20mN · m DirectionAB, BC, CD, DA 25±20mN · m	10±7mN∙m	0.8±0.5N	1.2±0.6N	1.23 ±0.69N	1.2 ±0.69N	
	Push operating force		5±2N	3±1.5N	4.5±1N	2.5±1.5N	2.4±0.69N	2.35±0.69N		
pe≤	Encoder detent torque		15±8mN∙m	12±8mN∙m						
Mechanica performan		ninal ngth	5N for 1min.	_						
nical nance	출 Pushing		100N			30N				
	ator strength	Operating direction	0.4N·m	0.3N·m	0.15N∙m	20N				
En		ation		200±4 to 8.3±1Hz,4 e 3 direction of X, Y and			10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2 hours respectively			
Endurance	witho	ting life ut load								
		life with load ed load)								
Enviro	Co	old		-40±2℃ for 500h		-40±2°C for 96h	h _30±2℃ for 96h			

Devices

Multi Control

Variable Resistor Type

Switch Type

260°C max. 6s max.

481

85±2°C for 96h

350±10°C 3⁺₃ s

482

80±2°C for 96h

350°C max. 3s max.

60±2°C,90 to 95%RH for 96h

Please see P.495

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Note

Omarks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C.

85±2℃ for 500h

60±2°C, 90 to 95%RH for 500h

350±5°C 3s max.

479

260±5°C,5±1s

478

Dry heat

Damp heat

Manual soldering

Dip soldering

Reflow soldering

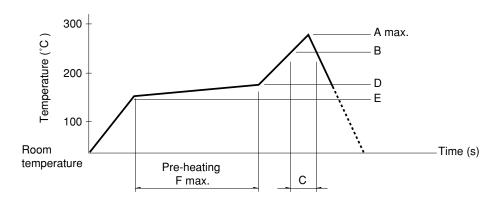
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Soldering Conditions

Example of Reflow Soldering Condition

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple 0.1 to 0.2ϕ CA (K) or CC (T) at solder joints copper foil surface). A heat resistive tape should be used to fix thermocouple.
- 3. Temperature profile

Multi Control Devices



Series(Reflow type)	A (℃) 3s max.	B (℃)	C (s)	D (℃)	E (°C)	F(s)
RKJXS	260		40	150	150	120
SLLB, SLLB5	240	230	20	130		
SKRV/SKRH/SKQUBA,DB/SSAF/SRBE	260		40	180		

Variable Resistor Type

Switch Type

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