

List of Varieties

Items		Series	Variable resistor type	
			RKJXK	RKJXP
Photo				
Function				
Dimensions (typical value) (mm)	W		20.7	20.8
	D		25.4	25.8
	H		12.9	12.2
Outlined specifica-tions	Number of operating shafts		Single-shaft	
	Shaft material		Metal	Resin
	Directional resolution		Continuous	
	Directional operating feeling (tactic feeling)		Without	
	Directional operating force		8mN·m max. Without Lever return type 6 ± 4mN·m Lever reset type	17 ± 10mN·m
	Center-push switch		With/Without	With
	Encoder		Without	
Operating temperature range			-10 to +70	
Electrical performance	Directional resolution		Continuous	
	Insulation resistance		100MΩ min. 250V DC	
	Voltage proof		250V AC for 1minute	
Mechanical performance	Push operating force		5.2 ± 2.6N	6.4 ^{+3.4} _{-2.6} N
Slider noise			300mV max. by JIS method	
Lever stopper strength			0.3N·m	—————
Lever play			5° max.	
Lever strength			50N min.(Push/Pull)	98N min.(Push) 50N min.(Pull)
Environmental performance	Cold		-30 ± 2 for 96h	
	Dry heat		80 ± 2 for 96h	
	Damp heat		60 ± 2 , 90 to 95%RH for 96h	
Soldering	Manual soldering		300 max. 3s max.	
	Dip soldering		260 ± 5 , 5 ± 1s	
	Manual soldering		—————	
Page			472	

Multi Control
DevicesVariable
Resistor Type
Switch
Type

• Variable Resistor Type Multi Control Devices Caution474

Note

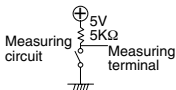
Please contact us for export packing details.

List of Varieties

Series		Switch type						
		RKJXT1F	RKJXM	RKJXL	RKJXS	SKRV	SKRH	
Items							SKRHAA SKRHAB	SKRHAC SKRHAD
Photo								
Function								
Dimensions (typical value) (mm)	W	17	20.5	13	11.7	6.45	7.35/7.45	
	D				12.3	6.4	7.5	
	H	10.5	5.45	6.4	2.3	4	5	
Outlined specifications	Number of operating shafts	Single-shaft	Single-shaft/Dual-shaft	Single-shaft				
	Shaft material	Metal				Resin		
	Directional resolution	4-direction	8-direction			4-direction		
	Directional operating feeling (tactile feeling)	With		Without		With		
	Lever return mechanism	With						
	Center-push switch	With						
	Encoder	With	Without/With	Without				
Operating temperature range		-40 to +85	-30 to +80	-30 to +70	-20 to +70		-30 to +85	
Rating (max. X Resistive load)		10mA 5V DC				50mA 12V DC		
Electrical performance	Output voltage	Measuring circuit 5V 5kΩ Measuring terminal 1V max. at 1mA 5V DC (Resistive load)						
	Directional resolution	4-direction	8-direction			4-direction		
	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.	100V AC for 1min.	
	Directional operating force	40 ± 25mN・m	Direction A, B, C, D 30 ± 20mN・m Direction AB, 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
Mechanical performance	Push operating force	5 ± 2N	3 ± 1.5N	4.5 ± 1N	2.5 ± 1.5N	2.4 ± 0.69N	2.35 ± 0.69N	
	Encoder detent torque	15 ± 8mN・m	12 ± 8mN・m					
	Terminal strength	5N for 1min.						
	Actuator strength	Pushing direction	100N			30N		
	Operating direction	0.4N・m	0.3N・m	0.15N・m	20N			
Endurance	Vibration	8.3 ± 1 to 200 ± 4 to 8.3 ± 1Hz, 4.4G fixed (for 15 min./1 cycle) 3 angles each 2 hours				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		
	Operating life without load							
	Operating life with load (at rated load)							
Environmental performance	Cold	-40 ± 2 for 500h			-40 ± 2 for 96h	-30 ± 2 for 96h		
	Dry heat	85 ± 2 for 500h			85 ± 2 for 96h	80 ± 2 for 96h		
	Damp heat	60 ± 2, 90 to 95%RH for 500h			60 ± 2, 90 to 95%RH for 96h			
Soldering	Manual soldering	350 ± 5 3s max.			350 ± 10 3 [±] s	350 max. 3s max.		
	Dip soldering	260 ± 5, 5 ± 1s		260 max. 6s max.				
	Reflow soldering				Please see P.492			
Page		475	476	478	479	480	481	

- Switch Type Multi Control Devices Soldering Conditions492
- Switch Type Multi Control Devices Cautions493

List of Varieties

Series Items		Switch type							
		SKQU			SSAF	SRBE	SLLB	SLLB5 Small type	
		SKQUAA/SKQUBA	SKQUCA	SKQUDB					
Photo									
Function									
Dimensions (typical value) (mm)	W	10			10.85	12	11.8	9.5	
	D					11	11.4	8.8	
	H	7.1	10	8.6	3	3.8	3	2.2	
Outlined specifications	Number of operating shafts	Single-shaft							
	Shaft material	Resin							
	Directional resolution	4-direction			8-direction	-	2-direction		
	Directional operating feeling	With			Without	With	Without		
	Lever return mechanism	With				Without	With		
	Center-push switch	With/Without			With		With/ Without	With	
	Encoder	Without				With		Without	
Operating temperature range		-30 to +85			-10 to +60				
Rating (max. X Resistive load)		50mA 12V DC			20mA 5V DC	1mA 5V DC	10mA 5V DC		
Electrical performance	Output voltage				1V max. at 1mA 5V DC (Resistive load)				
	Directional resolution	4-direction			8-direction	-	2-direction		
	Insulation resistance	100MΩ min. 100V DC			10MΩ min. 100V DC	50MΩ min. 50V DC	100MΩ min. 100V DC		
	Voltage proof	250V AC for 1min.			100V AC for 1min.	50V AC for 1min.	100V AC for 1min.		
	Directional operating force	1.57 ^{+0.49} _{-0.59} N	1.57 ^{+0.39} _{-0.69} N		0.5N ^{+0.5} _{-0.35} N	—	0.65 ± 0.3N		
Mechanical performance	Push operating force	—	3.14 ± 0.59N		2.5 ^{+0.7} _{-0.5} N	3.5 ± 1.5N	2 ± 1N	2.5 ± 1N	
	Encoder detent torque	—				3 ± 2mN・m		—	
	Terminal strength	—						3N for 1min.	
	Actuator strength	Pushing direction	—			50N			
		Operating direction	—			50N	—	10N	
Endurance	Vibration	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							
	Operating life without load	—						100,000cycles	
	Operating life with load (at rated load)								
Environmental performance	Cold	-30 ± 2 for 96h			-40 ± 2 for 96h		-20 ± 2 for 96h		
	Dry heat	80 ± 2 for 96h			85 ± 2 for 96h				
	Damp heat	60 ± 2 , 90 to 95%RH for 96h			40 ± 2 , 90 to 95%RH for 96h				
Soldering	Manual soldering	350 max. 3s max.			350 ± 10 4 ⁺¹ ₀ s	350 ± 5 3s max.			
	Dip soldering	260 max. 5s max. (SKQUAA,CA)							
	Reflow soldering	Please see P.492 (SKQUBA,DB)			Please see P.492				
Page		482			484	486	488	490	

Multi Control
DevicesVariable
Resistor TypeSwitch
Type

- Switch Type Multi Control Devices Soldering Conditions492
- Switch Type Multi Control Devices Cautions493