Part number **RKJXM1015004** 8-directional Stick Switch (with Center-push Function) RKJXM Series

Standard

Basic information

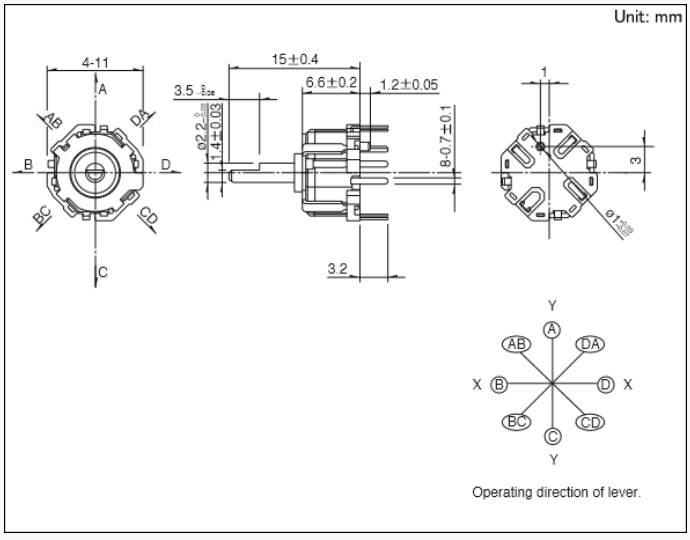
+ ZOOM

Number of operating shafts	Single-shaft
Shaft material	Metal
Directional resolution	8-direction
Operating angle (Directions)	A, B, C, D direction: 10°max. AB, BC, CD, DA direction: 12°max.
Travel (Center push)	0.3±0.2mm
Dimensions (W×D×H)	11.0×11.0×6.6mm

Specifications

Operating temperature range			-40°C to +85°C
Ratings (max.) (Resistive load)			10mA 5V DC
Electrical performance	**Contact resistance (Directions & Center push)**		1Ω max.
	Insulation resistance		100MΩ min. 250V DC
	Voltage proof		300V AC for 1 minute or 360V AC for 2s
Mechanical performance	**Directional operating force**		Direction A, B, C, D 30±20mN·m Direction AB, BC, CD, DA 25±20mN·m
	Push operating force		3±1.5N
	Terminal strength		5N for 1 minute
	Actuator strength	**Push/pull directions**	100N (Push), 50N (Pull)
		Operating direction	0.3N·m
Durability	**Operating life**	**Directions**	Total with 8-direction 100,000 cycles
		Center push	100,000 cycles
Environmental performance	**Cold**		-40°C 500h
	Dry heat		85°C 500h
	Damp heat		60°C, 90 to 95%RH 500h
Minimum order unit(pcs.)	**Japan**		1,000
	Export		2,000

Dimensions



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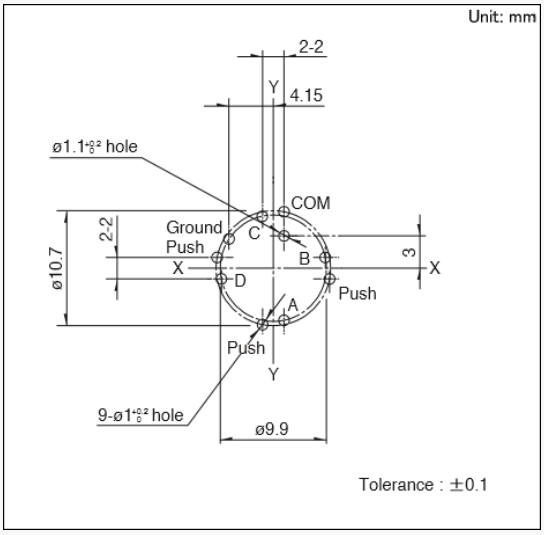
Mounting Hole Dimensions



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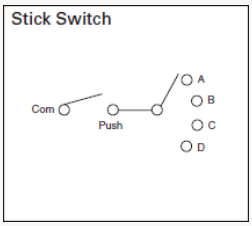
Viewed from mounting side.

Circuit Diagram



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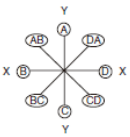
Output Relation Chart between Lever Position and ON Position.

Terminal	Operation procedure								
	A	AB	B	BC	C	CD	D	DA	Center Push
Com-A	ON	ON						ON	
Com-B		ON	ON	ON					
Com-C				ON	ON	ON			
Com-D						ON	ON	ON	
Com-Push	ON	ON	ON	ON	ON	ON	ON	ON	ON



Operating direction of lever.

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Packing Specifications

Tray

Number of packages (pcs.)	
1 case / Japan	1,000
1 case / export packing	2,000

Export package measurements (mm)

405×290×200

Soldering Condition

Reference for Dip Soldering

Preheating	
Soldering surface temperature	100˚C max.
Heating time	2 min. max.

Dip soldering	
Soldering temperature	260±5˚C
Soldering time	5±1s

No. of solders

2 time max.

Reference for Hand Soldering

Tip temperature

350±5˚C

Soldering time

3s max.

No. of solders

1 time

Notes are common to this series/models

1. This site catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
2. Please place purchase orders per minimum order unit (integer).
3. This products can be used in vehicles.
   Although these products are designed to perform over a wide operating temperature range, please ensure that you receive and read the formal delivery specifications before use.

Cautions

1. Appling load to terminals during soldering under certain conditions may cause deformation and electrical property degradation.
2. Avoid use of water-soluble soldering flux, since it may corrode the switches.
3. Check and conform to soldering requirements under actual mass production conditions.
4. In soldering twice, make sure the solder joints should go down to normal temperature. Continuing heating will cause deformation of switch, loose and fracfored terminals, or may deteriorate electrical characteristics.
5. Flux from around and above the PC board should not adhere to the switches.
6. For the sizes of holes and patterns on a PC board for mounting a switch, refer to the recommended dimensions in the outline drawings.
7. This switch is designed for manually operated units. Must not use this switch for a mechanical detection unit. For detection purposes, please use our detection switches.
8. After mounting the switches, if you intend to put the board into an oven in order to harden adhesive for other parts, please consult with ALPS.

9. Use of a through-hole PC board, or a PC board of different thickness from the recommendation will have a different heat stress. Verify the soldering requirements thoroughly before use.
10. Solder the switches with detent at the detent position. Soldering switches fixed at the center of the detent may deform the detent mechanisms.
11. No washing.
12. Protect small and thin switches from external forces in the set mounting process.
13. Use of the switches with voltage below 1V DC or current below 10μA may make contacts unstable.
    When using these switches in this way, please consult with us beforehand.
14. The products are designed and manufactured for direct current resistance. Contact us
    for use of other resistances such as inductive (L) or capacitive (C).
15. The switch will be broken if impact force or a greater stress than that specified is applied. Take a great care not to let the switch be subject to greater stress than specified.
16. Do not apply a force from the side of the stem.
17. Be sure to push the center of switch for "without-stem"type. Extreme care is required for a hinge structure type because the stem press position moves when it is pressed.
18. Insert these switches to the specified mounting surface and mount them horizontally. If not mounted horizontally, these switches will malfunction.
19. Use of the switches in a dusty environment may lead the dusts entering through the openings and cause imperfect contact or malfunction. Take this into account for set design.
20. Corrosive gas if generated by peripheral parts of a set, malfunction such as imperfect contact may occur. Thorough investigation shall be required beforehand.
21. Be aware of dust intrusion into a non dust-proof-type TACT Switch™.
22. Storage
    1. 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.
    2. Store the key switches with the switch in the released position.