

List of Varieties

Series	SPEE	SPPJ6	SPPJ3	SPPJ2	SPUJ ₁	SPUP ₁	SPUN	SPUN _{medium current 1}	SPEG	SPPH2		
Detector	Photo											
Push												
Slide	Travel (mm) 0.3 0.71	1.5	2.5		2	1.5 2	2.5			1		
Rotary	Total travel (mm)	0.9	2.5	3.5		3	2.5 3	3.5		1.2	1.5	
Encoders	Number of poles	1	2	1 2	2	2 4		1		2		
Power	Dimensions (mm)	W	4	9		6.6	7.2	7.5		10	7.15	6.5
Dual-in-line Package Type		D	5	12		15.2 22.7		24 36		8.35	6	
TACT Switch™		H	1.22	4.5	8.3	9.6	8.8	10.3	13		3.5	6.5
Custom-Products	Operating temperature range	- 10°C to + 60°C		- 40°C to + 85°C		- 10°C to + 60°C						
	Rating (max. χ Resistive load)	20mA 5V DC	0.2mA 5V DC	0.2mA 30V DC		0.1mA 30V DC			1A 25V DC	50mA 16V DC	0.1A 12V DC	
	Rating (min. χ Resistive load)	100 μ A 3V DC	50 μ A 3V DC					50 μ A 3V DC				
Electrical performance	Initial contact resistance	2	20m max.						200m max.	30m max.		
	Insulation resistance	10M min. 100V DC	100M min. 500V DC						3M min. 100V DC	100M min. 500V DC		
	Voltage proof	100V AC for 1minute	500V AC for 1minute						100V AC for 1minute	500V AC for 1minute		
Mechanical performance	Terminal strength	5N for 1minute								0.5N for 1minute	5N for 1minute	
	Actuator strength	Operating direction	50N		30N		50N			50N	30N	
Durability	Operating life without load	100,000 cycles	10,000cycles 40m max.				30,000cycles 40m max.	10,000cycles 40m max.	35,000cycles 500m max.	10,000cycles 50m max.		
	Operating life without load Load:as rating	100,000 cycles	10,000cycles 40m max.				5,000cycles 40m max.					
Environmental performance	Cold	-40 \pm 2 for 96h	-20 \pm 2 for 96h						-20 \pm 2 for 96h			
	Dry heat	85 \pm 2 for 96h							85 \pm 2 for 96h			
	Damp heat	40 \pm 2 , 90 to 95%RH for 96h							40 \pm 2 , 90 to 95%RH for 96h			
Soldering	Manual soldering	350 \pm 10 4 ⁺¹ ₀ s	350 \pm 10 3 ⁺¹ ₀ s		300 \pm 10 3 ⁺¹ ₀ s		350 \pm 10 3 ⁺¹ ₀ s		350 \pm 5 3s max.	350 max. 3s max.		
	Dip soldering		260 \pm 5 5 \pm 1s	260 \pm 5 10 \pm 1s	260 \pm 5 5 \pm 1s		260 \pm 5 10 \pm 1s			260 \pm 5 5 \pm 1s		
	Reflow soldering	Please see P.108							Please see P.108			
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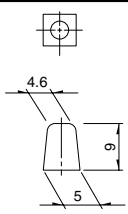
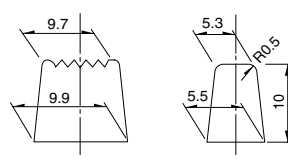
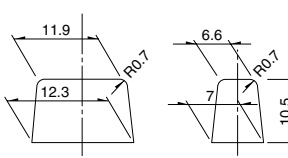
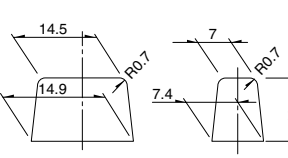
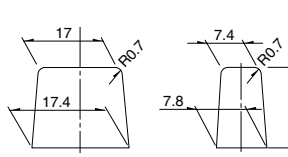
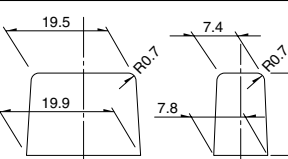
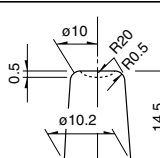
Notes

- ※1. The operating temperature range for automotive applications can be raised upon request. Please contact us for requirements of this kind.
- ※2. 1V or less, at the present rating of 1mA, 5V DC for output voltage.

Attached Parts

Please specify required knob.

Unit:mm

Knob outline drawing	Variety		Series
	Color	Model	
	Black Red White	UJ206022 UJ206020 UJ206026	SPPJ3 SPUJ
<p>Key pitch 10mm</p> <p>Square knob</p> 		4093-1 4093-2 4093-3	
<p>Key pitch 12.5mm</p> <p>Square knob</p> 		UE201011 UE201012 UE201013	
<p>Key pitch 15mm</p> <p>Square knob</p> 		UE202011 UE202012 UE202013	SPPJ2 SPUP SPUN SPEC
<p>Key pitch 17.5mm</p> <p>Square knob</p> 		UE203011 UE203012 UE203013	
<p>Key pitch 20mm</p> <p>Square knob</p> 		UE204011 UE204012 UE204013	
<p>Round knob</p> 		UE200011 UE200012 UE200013	

- Detector
- Push**
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

- Horizontal Type
- Vertical Type

Note

We recommend the use of adhesive to secure the knob when mounting onto switches.

