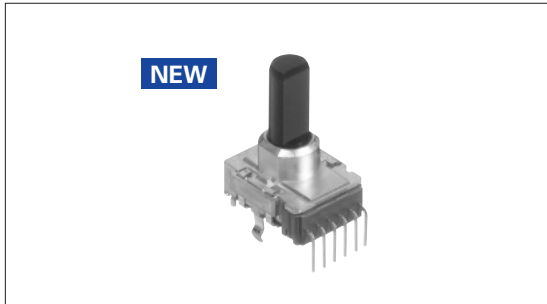


# Potentiometer 12mm Size Insulated Shaft Snap-in Custom Type

RK12L115 Series



Low-profile and good operational feel are excellent for car air conditioners.



## Typical Specifications

Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	20V DC/50V AC
Rating power	0.05W
Total rotational angle	300±5°
Detent slip-out torque	25±15mN·m
Operating life	15,000cycles
Operating temperature range	-40°C to +85°C

Rotary Potentiometers  
Slide Potentiometers

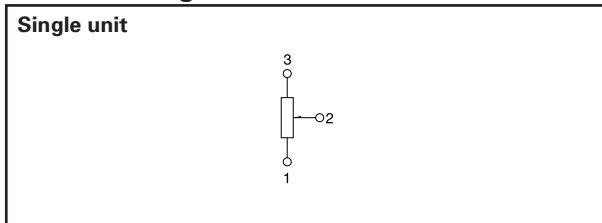
## Dimensions

Unit:mm

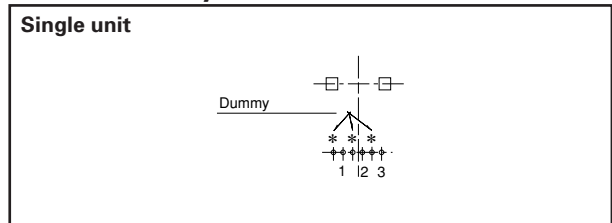
Style	PC board mounting hole dimensions (Viewed from the direction A)
	<p>PC board mounting hole dimensions (Tolerance ±0.1) Viewed from mounting side.</p>

Metal Shaft  
Insulated Shaft  
Knob Operating

## Circuit Diagram



## Terminal Layout



## Packing specifications

Tray

Length of the shaft LM <sub>1</sub> (mm)	Number of packages (pcs.)			Export package measurements (mm)
	Minimum order unit (pcs.)	1 case /Japan	1 case/export packing	
15	1,200	1,200	2,400	374 × 532 × 240
20	1,000	1,000	2,000	
25,30	800	800	1,600	

## Note

- The number of clicks of this product is customizable. Please make an inquiry together with the matters specified in the next page if you have such a request.
- Please place purchase orders per minimum order unit N (integer).



Automotive Use

Refer to P.401, 456 for resistance taper.

## Orders Other Than Recommended Products

When ordering product varieties that are not listed in the Product Line, please specify by referring to the below example.

### Sample Part Number



#### Model type

Code	Model type
5	Vertical type, middle rang detent torque

#### Shaft type

Code	Shaft type
F	Flat

\* Only available in flat type.

#### Length of the shaft (L<sub>1</sub>) (mm)

Code	Length of the shaft
25	25

#### Detent

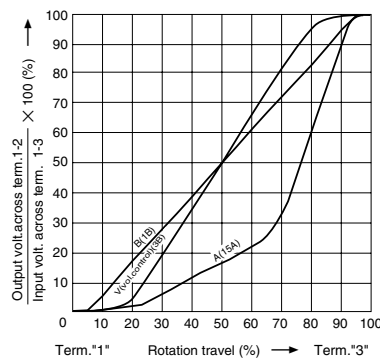
Code	Detent
CZ	custom

#### Resistance taper

Code	Resistance taper
A	15A
B	1B
V	3B

B:For tone & general

V:For vol.



#### Total resistance

Code	Total resistance (kΩ)	Code	Total resistance (kΩ)
502	5	503	50
103	10	104	100
203	20		

#### Note

marked are specifications recommended by ALPS.

Rotary Potentiometers  
Slide Potentiometers

Metal Shaft  
Insulated Shaft  
Knob Operating

## List of Varieties

Items	Type		9mm Size Insulated Shaft Snap-in	11mm Size Insulated Shaft Snap-in	12mm Size Insulated Shaft Snap-in	14mm Size Insulated Shaft Snap-in	9mm Size Insulated shaft Long-life	12mm Size Insulated shaft Snap-in	
	Model		RK09K11□ RK09D11□	RK09K12□	RK11K11□	RK12L12□	RK14K12□	RK09Y11L	RK12L115
			Single-unit	Dual-unit	Single-unit	Dual-unit		Single-unit	
Photo									
Bushing			Without	With/With out	Without	With/With out	Without	With	
Operating temperature range			-10°C to +70°C						-40°C to +85°C
Electrical performance	Total resistance tolerance		±20%	±30%	±20%		±30%	±20%	
	Maximum operating voltage		50V AC 20V DC	50V AC For AC only	50V AC 20V DC	50V AC For AC only		50V AC 5V DC	50V AC 20V DC
	Insulation resistance		100MΩ min. 250V DC		100MΩ min. 500V DC	100MΩ min. 250V DC			
	Voltage proof		250V AC for 1minute		500V AC for 1minute	300V AC for 1minute		250V AC for 1minute	300V AC for 1minute
	Gang error		—	-40dB to 0dB 3dB max.	—	Volume control -40dB to 0dB 3dB max. For tone control within 2dB at center		—	—
Mechanical performance	Strength of the actuator	Stopper strength	0.3N·m		Without bushing 0.5N·m With bushing 0.6N·m	0.5N·m	0.6N·m	—	0.5N·m
		Push-pull strength	50N max.		80N max.		30N max.	80N max.	
	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 and for 2 hours respectively						
	Resistance to soldering heat	Manual soldering	350°C max. 3s max.						
Dip Soldering		—		260°C max. 5s max.	—				
Environmental performance	Cold		-30±2°C for 96h				-30±2°C for 240h	-40±3°C for 96h	
	Dry heat		70±2°C for 96h		70±2°C for 240h	70±2°C for 96h	70±2°C for 240h	85±3°C for 96h	
	Damp heat		40±2°C, 90 to 95% RH for 96h				40±2°C, 90 to 95% RH for 240h	40±2°C, 90 to 95% RH for 96h	
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● Insulated Shaft Potentiometers Cautions .....402, 403

Rotary Potentiometers  
Slide Potentiometers

Metal Shaft  
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