A 14mm wide potentiometer for audio, visual, electronic musical instruments and various applications



■ Typical Specifications

Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	50V AC for AC only
Total rotational angle	300° ±5°
Rotational torque	3 to 20mN·m
Operating life	15,000 cycles
Operating temperature range	−10°C to +70°C

Product Line

Number of resistor elements	Control part orientation	Shaft type	Length of the shaft LM ₁ (mm)	Center detent	Total resistance (k Ω)	Resistance taper	Minimum ord Japan	er unit (pcs.) Export	Products No.	Drawing No.	
Dual-unit	Vertical		NACAL.			10			RK14K124003H	1	
for tone	Horizontal	Flat	22.5	With	10	1B	IB	800	1.600	RK14K1220012	2
Dual-unit	Vertical	riat	22.5 10 15A		15.4	800	1,000	RK14K12D0A5V	1		
for vol.	Horizontal			Without		IDA			RK14K12B0A0E	2	

Notes

- 1. Other varieties are also available. Refer to "Other Specifications" (P.327).
- 2. Nut and washer are not attached. Please specify if required.

Packing Specifications

Tray

Number of pa	Export package	
1 case / Japan	1 case / export packing	measurements (mm)
1,000	2,000	543×377×250

Dimensions PC board mounting hole dimensions (Viewed from mounting side) Photo Style No. Vertical RK14K124 (For tone control) RK14K12D (For vol. control) Shaft shown in full CCW position M9G0.75 Mounting surface Horizontal RK14K122 (For tone control) Shaft shown in full CCW position RK14K12B (For vol. control) (7.5) 2 M9×0.75 7-ø1 hole

13.5 16.1

In addition to the Product Line, we accommodate the following specifications. Combinations not included in the Product Line are treated as semi-standard products.

14mm Size Insulated Shaft Snap-in Type / Other Specifications

■ Total Resistance Variety

Total resistance (k Ω)	5	10	20	50	100
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Resistance Taper

Tresistance raper								
Resistance taper	15A	1B	3B	15C				

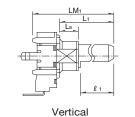
■ Tapped Types are Also Available

RK14K12 (for audio volume control) is also available with tap.

Shaft Variety

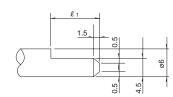
Unit:mm

Style	LM ₁ L _D



			Honzoma			Vortioai	
	LM ₁	20	22.5	25	27.5	30	32.5
Detail	Lı	12.5	15	17.5	20	22.5	25
dimensions	l ₁	7	7	12	12	12	12
	Lв	5	5	5	5	5	5

Detail dimensions



■ Terminal Layout / Circuit Diagram

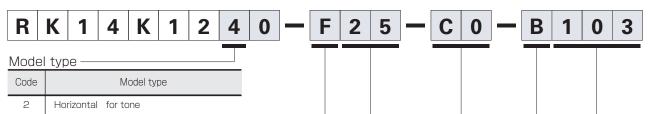
Without tap for volume	With tap for volume	For tone and for volume (15C)
©O	③ ② 2 3 ③ ② 2 3 ④ ○ → → → → → → → → → → → → → → → → → →	② O →

Note

Marked are specifications recommended by Alps Alpine.

In addition to the Product Line, we accommodate the following specifications. Combinations not included in the Product Line are treated as semi-standard products. Please refer to the notation example below.

Sample Part Number



Shaft type

4

В

 \Box

Code	Shaft type
F	Flat

for tone

for vol.

Vertical

Vertical

Horizontal for vol.

Length of the shaft LM₁ (mm)

Code	Length of the shaft	Code	Length of the shaft
20	20	25	25
22	22.5	30	30
27	27.5	32	32.5

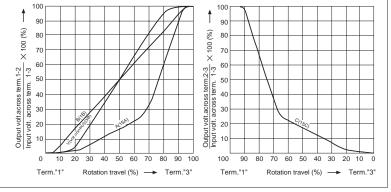
Detent-

Code	Center detent		
CO	Without		
C1	With		

Resistance taper -

Code	Resistance taper	Code	Resistance taper
А	15A	С	15C
В	1B	V	3B

B: For tone & general (Model type: 2, 4)



Total resistance

Code	Total resistance (k Ω)	Code	Total resistance (k Ω)	
502	5	503	50	
103	10	104	100	
203	20	_	_	

Note

Marked are specifications recommended by Alps Alpine.

^{*}Only available in flat format.

V: For vol. (Model type: B, D)

Туре		9mm size		11mm size	12mm size	14mm size
Series		RK09K11 RK09D11	RK09Y11L	RK11K	RK12L12	RK14K
		Single-unit	Single-unit	Single-unit	Dual-unit	Dual-unit
Photo						
Control part orientation		Vertical / Horizontal	Horizontal	Vertical / Horizontal		
Bushing		Without		With	Without	With
Operating temperature range		−10°C to +70°C				
С	Operating life	5,000 cycles	1,000,000 cycles	15,000 cycles		
Availat	ble for automotive use	_	_	_	_	_
	Life cycle	* 2	*2	* 2	* 2	*2
Electrical performance	Total resistance (k Ω)	5, 10, 20, 50, 100, 200	10	5, 10, 20, 50, 100, 200		
	Resistance taper	15A, 1B, 3B, 15C	В	15A, 1B, 3B, 15C		
	Total resistance tolerance	±20%	±30%	±20%		
	Rated power	0.05W	0.01W	0.05W		
	Maximum operating voltage	50V AC 20V DC	50V AC 5V DC	50V AC 50V AC 20V DC for AC only		
	Gang error	_	_	_	For volume control —40dB to 0dB 3dB max. For tone control within 2dB max. at center	
	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	
	Center-taps	Without		Without / With	Without	Without / With (Volume control)
	Detent	Without, Center	Without	Without, Center	Without	Without, Center
Mechanical performance	Stopper strength	0.3N·m		Without bushing 0.5N·m With bushing 0.6N·m	0.5N·m	0.6N·m
	Push-pull strength	50N 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			
Shaft configuration		Flat type, Knob type, Screwdriver type Flat type				
Terminal style		Insertion				
Page		313 329 (for Mixers)	318	319 329 (for Mixers)	322 329 (for Mixers)	325 329 (for Mixers)

Note

[•] Indicates applicability to all products in the series.

Series	Tip temperature	Soldering time	No. of solders
RK09D, RK09K, RK09Y11L, RK11K, RK12L, RK14K	350°C max.	3s max.	1 time

■ Reference for Dip Soldering

■ Reference for Manual Soldering

Series	Preheating		Dip soldering		Nie of soldon
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	No. of solders
RK12L	100℃	1 min. max.	260°C max.	5s max.	2 time max.

Insulated Shaft Potentiometers / Soldering Conditions

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Alps Alpine:

RK14K12C0A0T RK14K12B0A0R RK14K1230A0X RK14K12C0A1S RK14K1230A2X RK14K1240D04

RK14K1240062 RK14K1220A25 RK14K1240036 RK14K1240A4S RK14K12D0A18 RK14K1220A0F

RK14K12D0A1X RK14K1210A1B RK14K12A0A3C RK14K1220024 RK14K1240-F32-C0-B104 RK14K1220025

RK14K1240A4S HARDWARE RK14K1220F25C0C104 RK14K1220-F25-C0-A103 RK14K1240-F20-C0-B103

RK14K1240-F32-C0-A503 RK14K1240F0B103 HARDWARE RK14K1240D1M RK14K1240-F32-C0-B103

RK14K1240-F32-C1-B103 RK14K12B0A0E HARDWARE RK14K1240-F32-C0-A104 RK14K124003Y RK14K1220-F25-C1-B103 RK14K1240-F32-C1-B104 RK14K1240-F32-C1-B103 RK14K1240-F32-C1-B104 RK14K1240-F32-C1-B503 RK14K124003J RK14K1240-F25-C0-A203