Compact type potentiometer suitable for volume and tone controls





Typical Specifications

Items	Specifications
Total resistance tolerance	±30%
Maximum operating voltage	50V AC 20V DC (Single-unit only)
Total rotational angle	200°±10°
Rotational torque	1 to 10mN·m 0.5 to 10mN·m (Reflow type)
Operating life	Without detent 10,000 cycles With detent 5,000 cycles
Operating temperature range	−10°C to +60°C

Product Line

Number of	Mounting	Length of the	Center detent Total	Resistance	Minimum ord	er unit (pcs.)	Products No.	Drawing								
resistor elements	method	shaft (mm)	Ochter detent	resistance(kΩ)	taper	Japan	Export	T TOUGGES TVO.	No.							
	Manual	Manual	Without	10	18			RK08H11100UD								
Single-unit	ividi ludi		With					RK08H11100RB	'							
	Reflow	1	10 Without		10	1,00	1,000	1,000 1,000	RK08H113003Q	2						
Dual-unit	Manual				150			RK08H12100GZ	1							
Dual-uriit	Reflow												15A			RK08H1230012

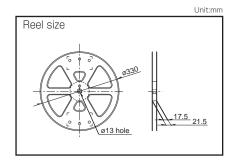
Notes

- 1. Other varieties are also available. Refer to "Other Specifications" (P.336).
- 2. The above products are compatible with dip soldering. If required, please specify "dip soldering type."
- 3. We recommend print boards with a thickness of 0.8mm to 1.2mm. For 1.6mm thickness board applications, please contact us.

Packing Specifications

Bulk / Taping

Mounting	Packing	Number	of package	s (pcs.)	Tape width	Export package
method	specifications	1 reel	1 case /Japan	1 case /export packing	(mm)	measurements (mm)
Manual	Bulk	_	5,000	10,000	_	528×369×178
Reflow	Taping	1,000	4,000	4,000	16	401×397×139



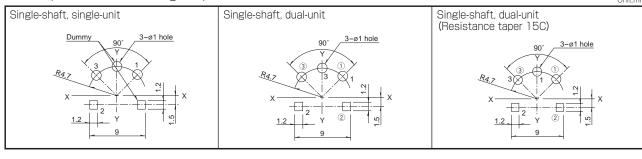
Dimensions

Unit:mm

No.	Photo	Style
1	Manual Single-shaft, single-unit RK08H1110 Single-shaft, dual-unit RK08H1210	M1.4×0.3depth3.2 Shaft shown in full CCW position No. 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2	Reflow Single-shaft, single-unit RK08H1130 Single-shaft, dual-unit RK08H1230	M1.4×0.3depth3.2 Shaft shown in full CCW position Mounting surface

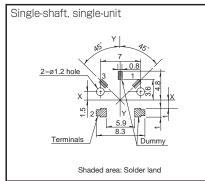
PC Board Mounting Hole Dimensions / Terminal Layout Manual (Viewed from mounting side)

Unit:mm



Reflow (Viewed from mounting side)

Unit:mm Single-shaft, dual-unit (Resistance taper 15C) Single-shaft, dual-unit 2-ø1.2 hole 2-ø1.2 hole Terminals Terminals Shaded area: Solder land Shaded area: Solder land

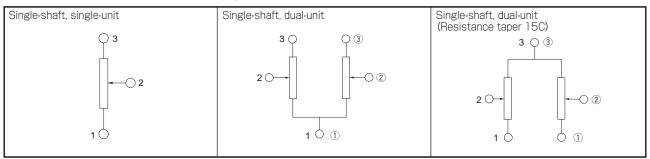


Note

Keep the DUMMY terminal open in the circuit.



■ Standard Specification Circuit Diagram



Without Knob Type / Other Specifications

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

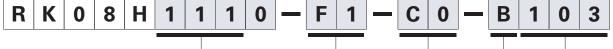
Total Resistance Variety

Total resistance (k Ω)	5	10	20	50	100
Resistance Taper					
Resistance taper	15A	1B		3B	15C

Without Knob Type / Ordering Products Not Listed

Please refer to the notation example below for specification combinations not included in the Product Line.

Sample Part Number



Model type -

Model type
Single-unit Manual
Single-unit Reflow
Dual-unit Manual
Dual-unit Reflow

Length of the shaft (mm) -

Code	Length of the shaft
Fl	1

^{*}Only 1mm types are provided with the M1.4 tap screws.

Detent -

Code	Center detent
CO	Without
C1	With

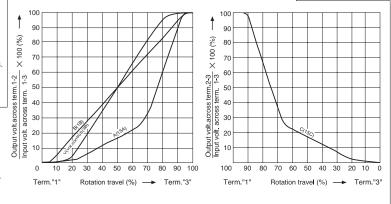
^{*}Detent can only be specified for non-reflow single-unit types.

Resistance taper —

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

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.

	Туре	Without k	knob type	With kn	ob type	
	Onder	RK08H1 🗌 1	RK08H1 ☐ 3	RK10J1 □ E	RK10J1 □ R	
Series -		Single-unit/Dual-unit	Single-unit/Dual-unit	Single-unit/Dual-unit	Single-unit/Dual-unit	
	Photo					
Te	erminal orientation	Vertical	Reflow type	_	_	
Opera:	ting temperature range		_10℃ to	0 +60℃		
	Operating life	Without detent With detent	10,000 cycles 5,000 cycles	10,000) cycles	
	Automotive use	_	_	_	_	
	Life cycle	,	2	*2		
	Total resistance (k Ω)	5, 10, 20, 50, 100		10, 20, 50, 100		
	Resistance taper		15A, 1B,	3B, 15C		
Electrical performance	Rated power		0.0	93W		
	Insulation resistance			100MΩ min. 100V DC		
	Voltage proof			100V AC for 1minute		
	Detent	Without / Center detent		Without		
Mechanical performance	Stopper strength	0.	IN	70mN·m		
	Push-pull strength	10	DN	5N		
	Terminal style	Insertion	Reflow	Insertion	Reflow	
	Page	33	33	337		

Residual Resistance	※ Applies only to products with specified residual resistance
Nominal total resistance	% Residual resistance
100kΩ≧R≧50kΩ	0.1% or less of nominal total resistance
50kΩ>R>10kΩ	30Ω or less
10kΩ≧R	20Ω or less

Maximum Attenuation

Nominal total resistance	Maximum attenuation
R≧100kΩ	90dB min.
100kΩ>R≧50kΩ	80dB min.
50kΩ>R≧10kΩ	70dB min.
10kΩ>R	60dB min.

Knob Operating Type Potentiometers Soldering Conditions
Potentiometers Cautions · · · · · · · · · · · · · · · · · · ·
Potentiometers Measurement and Test Methods · · · · · · · · · · · · · · · · · · ·
Potentiometers Resistance Taper · · · · · · · · · · · · · · · · · · ·