

Low-profile type with excellent operability
adds flexibility in set design



■ Typical Specifications

Items		Specifications
Total resistance tolerance		±20%
Maximum operating voltage		150V AC (RS60N Series) 350V AC (RSA0N Series)
Operating force	Single-unit	$0.3^{+0.5}_{-0.25}$ N
	Dual-unit	$0.4^{+0.5}_{-0.35}$ N
Operating life		30,000 cycles
Operating temperature range		-10°C to +60°C

■ Product Line

Number of resistor elements	Travel (mm)	Lever type	Length of lever (mm)	Total resistance (kΩ)	Resistance taper	Terminal style	Minimum order unit (pcs.)		Products No.	Drawing No.
							Japan	Export		
Single-unit	60	9-T (T-Bar)	8.2	10	15A	For PC board	300	600	RS60N111900H	1
	100						200	400	RSA0N111900Q	2
Dual-unit	60						300	600	RS60N1219A04	3
	100						200	400	RSA0N1219A03	4

Note

Other varieties are also available. Refer to "Other Specifications" (P.403).

■ Packing Specifications

Tray

Travel (mm)	Number of packages (pcs.)		Export package measurements (mm)
	1 case /Japan	1 case /export packing	
60	300	600	517×377×371
100	200	400	

Refer to P.403 for other specifications.
Refer to P.403 for details of lever types.
Refer to P.404 for ordering products not listed.
Refer to P.417 for soldering conditions

Dimensions

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from mounting side)
1		
2		
3		
4		

Rotary Potentiometers
Slide Potentiometers

General-use Mixer

Low-profile Master Type (N Fader) / Other Specifications

In addition to the products listed, we can accommodate the follow specifications.

Total Resistance Variety

Total resistance (k Ω)	10	50	100	250
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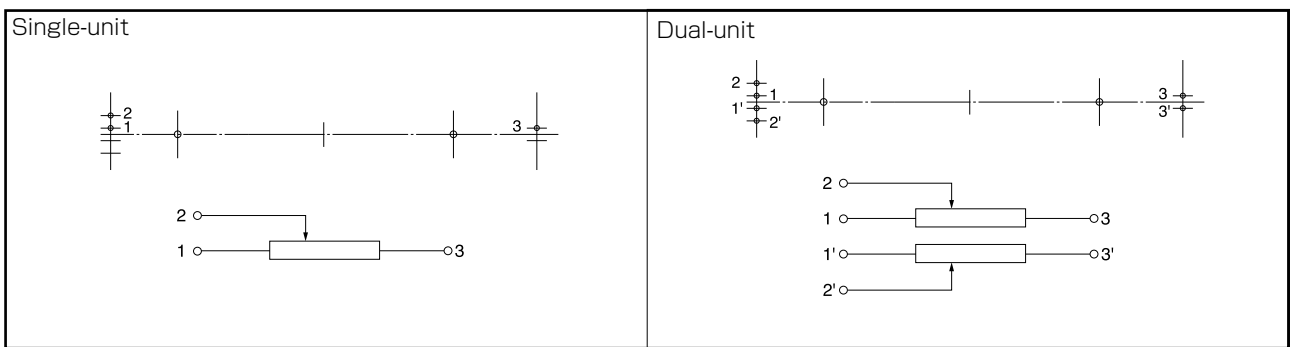
Resistance Taper

Resistance taper	15A	1B	10A
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Lever Types

Configuration code	1	4	9-T (T-Bar)
Dimensions			

Terminal Layout / Circuit Diagram (Viewed from Mounting Side)



Corresponding Specification

Dust cover	Available
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Note

Marked are specifications recommended by Alps Alpine.

When ordering product varieties that are not listed, specify referring to the examples below.

■ Sample Part Number

R S 6 0 N 1 1 1 - 9 T - A 1 0 3

Travel

60	60mm
A0	100mm

Number of resistor elements

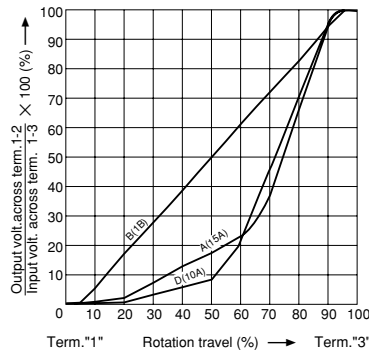
Single-unit	1
Dual-unit	2

Lever types

Code	Configuration code
01	1
04	4
9T	9-T (T-Bar)

Resistance taper

Code	Resistance taper
A	15A
B	1B
D	10A




Total resistance

Code	Total resistance (k Ω)	Code	Total resistance (k Ω)
103	10	104	100
503	50	254	250

Rotary Potentiometers
 Slide Potentiometers
 General-use
 Mixer


Slide Potentiometers

List of Varieties

Type		Standard Type		Master Type	Low-profile Master Type
Series		Super Slide™	Compact Reflow Type	K Fader	N Fader
		RS □□ 1	RS08U	RS □□ K	RS □□ N
		Single-unit/Dual-unit	Single-unit	Single-unit/Dual-unit	Single-unit/Dual-unit
Photo					
Travel (mm)		15, 20, 30, 45, 60	8	60, 100	
Direction of lever		Vertical		Horizontal	Vertical
Lever material		Metal / Resin	Resin	Metal	
Operating temperature range		-25°C to +70°C	-10°C to +70°C	-10°C to +60°C	
Operating life		15,000 cycles	10,000 cycles	100,000 cycles (Standard) 300,000 cycles (CP)	30,000 cycles
Available for automotive use		○	—	—	—
Life cycle (availability)					
Electrical performance	Total resistance (k Ω)	10, 20, 50, 100, 200	10	10, 50, 100 (Standard) 10 (CP)	10, 50, 100, 250
	Resistance taper	10A, 15A, 1B, 3B, 4B	1B	15A, 1B	15A, 1B, 10A
	Rated Power	Please see P.392	0.025W	0.25W	0.1W (RS60N) 0.25W (RSA0N)
	Insulation resistance	100MΩ min. 250V DC	100MΩ min. 100V DC	100MΩ min. 250V DC	
	Voltage proof	300V AC for 1 minute	100V AC for 1 minute	250V AC for 1 minute	
	Center-taps	Without / With	Without		
Mechanical performance	Operating force	0.3 to 2.5N	0.17±0.15N	Please see P.399	Single-unit: 0.3 ^{+0.5} _{-0.25} N Dual-unit: 0.4 ^{+0.5} _{-0.35} N
	Center detent	Without / With	Without		
	Stopper strength	50N	5N	100N	
	Lever push-pull strength	50N	5N	100N	50N
	Lever wobble (mm) ※ Both sides	$\frac{2(2 \times L)}{20}$	—	$\frac{2(2 \times L)}{25}$	
	Detent slip-out force	Operating force + (0.2 to 2N)	—	—	—
	Lever deviation (mm) ※ One side	0.5 max.	—	0.5 max.	0.5 max. (One side)
Terminal style		Insertion	Reflow	Lead (Standard) Connector (CP)	Insertion
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Notes

- "L" in the "Lever Wobble" column of the above table indicates the length of lever.
- [RS □□]  □□ indicates travel.
- Indicates applicability to some products in the series.

Reference for Manual Soldering

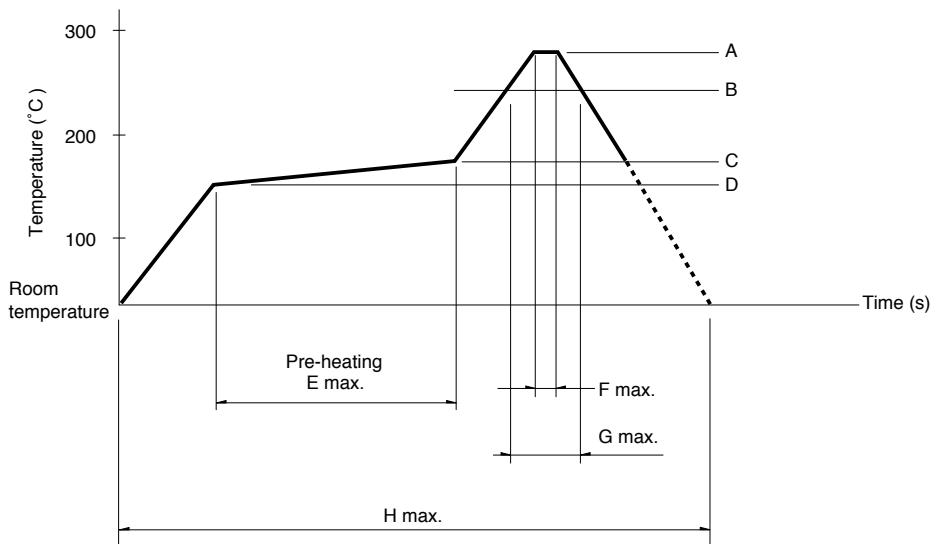
Series	Tip temperature	Duration of Soldering time	No. of solders
RS□□1, RS08U, RS□□K (Standard), RS□□N, RS□□N11S, RS6011□P, RS□□N1□M, RSA0K1□V (Motor terminal)	350°C max.	3s max.	1 time

Reference for Dip Soldering

Series	Preheating		Dip soldering		Number of soldering
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
RS□□1, RS□□N, RS□□N11S, RS6011□P, RS□□N1□M	100°C max.	1 min. max.	260°C	5s max.	1 time

Example of Reflow Soldering Condition

Temperature profile



Series	A	B	C	D	E	F	G	H	No. of reflows
RS08U	250°C	200°C	150°C	150°C	2 min.	3s	40s	4 min.	1 time

Notes

1. When using an infrared reflow oven, solder may sometimes not be applied. Be sure to use a hot air reflow oven or a type that uses infrared rays in combination with hot air.
2. The temperatures given above are the maximum temperatures at the terminals of the products when employing a hot air reflow method. The temperature of the PC board and the surface temperature of the products may vary greatly depending on the PC board material, its size and thickness. Ensure that the surface temperature of the products does not rise to 250°C or greater.
3. Conditions vary to some extent depending on the type of reflow bath used. Be sure to give due consideration to this prior to use.