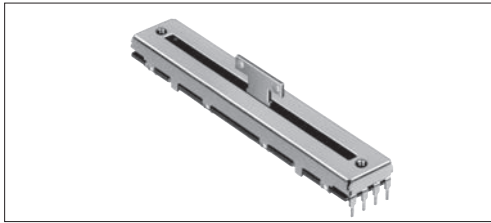


Low-profile type with excellent operability adds flexibility in set design.



#### 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 <sup>+0.5</sup> <sub>-0.25</sub> N
	Dual-unit	0.4 <sup>+0.5</sup> <sub>-0.35</sub> N
Operating life		30,000cycles
Operating temperature range		- 10°C to + 60°C

Rotary  
Potentiometers

Slide  
Potentiometers

General-use

Mixer

#### 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.389).

#### Packing Specifications

##### Tray

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

Refer to P.389 for other specifications.  
Refer to P.389 for details of lever types.  
Refer to P.390 for ordering products not listed.  
Refer to P.403 for soldering conditions

Unit:mm

Dimensions

Rotary  
Potentiometers

Slide  
Potentiometers

General-use

Mixer

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

# Low-profile Master Type Slide Potentiometer(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
------------------------	----	----	-----	-----

## Resistance Taper

Resistance taper	15A	1B	10A
------------------	-----	----	-----

## Lever Types

Unit:mm

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

## Terminal Layout / Circuit Diagram (Viewed from Mounting Side)

Single-unit	Dual-unit

## Corresponding Specification

Dust cover	Available
------------	-----------

## Notes

1.   marked are specifications recommended by Alps.
2. Other varieties are also available. Please inquire.

Rotary Potentiometers

Slide Potentiometers

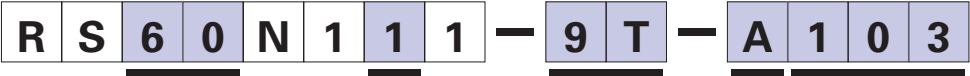
General-use

Mixer

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

Rotary Potentiometers  
Slide Potentiometers

**Sample Part Number**



**Travel**

60	60mm
A0	100mm

**Number of resistor elements**

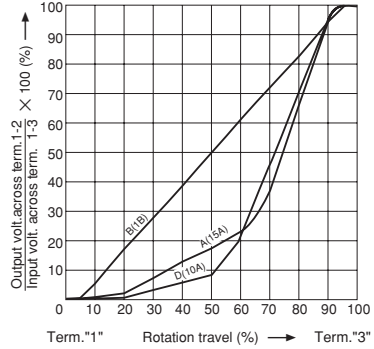
Single-unit	1
Dual-unit	2

**Type of operation unit**

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

General-use  
Mixer

## List of Varieties

Type	Master Type	Low-profile master type			Motor-driven master type			
Series	K Fader	N Fader	Slim Type	Super P Fader	Motor K Fader	Motor N Fader		
	RS □□ K	RS □□ N	RS □□ N11S	RS6011 □ P	RSA0K1 □ V	RS □□ N1 □ M		
photo								
Travel (mm)	60,100			60	100	60,100		
Direction of lever	Vertical							
Shaft material	Metal							
Number of resistor elements	Single-unit / Dual-unit		Single-unit	Single-unit / Dual-unit				
Operating temperature range	-10°C to +60°C							
Operating life	100,000cycles(Standard) 300,000cycles (CP)		30,000cycles		300,000cycles	30,000cycles		
Available for automotive use	_____		_____	_____	_____	_____		
Life cycle								
Electrical performance	Total resistance (kΩ)	10, 50, 100 (Standard) 10 (CP)		10, 50, 100, 250		10, 20, 50	10	10, 50, 100, 250
	Resistance taper	15A, 1B		15A, 1B, 10A		Single-unit: 1B Dual-unit: Servo 1B Audio 15A, 1B, 10A		
	Rated Power	0.25W		0.1W (RS60N) 0.25W (RSA0N)	0.2W (RS60N11S) 0.5W (RSA0N11S)	0.2W (Single-unit) 0.1W (Dual-unit)	0.5W	0.2W (RS60N1□M) 0.5W (RSA0N1□M)
	Insulation resistance	100MΩ min. 250V DC						
	Voltage proof	250V AC for 1 minute						
	Center-taps	Without						
Mechanical performance	Operating force	Please see P.385	Single-unit: 0.3 <sup>+0.5</sup> <sub>-0.25</sub> N Dual-unit: 0.4 <sup>+0.5</sup> <sub>-0.35</sub> N	0.3 <sup>+0.5</sup> <sub>-0.25</sub> N	0.5 <sup>+1.0</sup> <sub>-0.4</sub> N	Single-unit: 0.4±0.25N Dual-unit: 0.25 to 0.9N	0.8±0.5N	
	Center detent	Without						
	Stopper strength	100N						
	Lever push-pull strength	100N		50N				
	Lever wobble (mm) ※Both sides	$\frac{2(2 \times L)}{25}$						
	Lever deviation (mm)	0.5mm max. (One side)						
Terminal style	Lead (Standard) Connector (CP)		Insertion			Connector (Fader) Lead (Motor)	Lead, Insertion	
Page	382		387	391	394	397		

● Slide Potentiometers Soldering Conditions	403
● Potentiometer Cautions	404
● Potentiometers Measurement and Test Methods	406
● Potentiometers Resistance Taper	408

### Notes

- Attenuation is specified for residual resistance.
- "L" in the "Lever Wobble" column of the above table indicates the length of lever.

# Slide Potentiometers Soldering Conditions

Rotary Potentiometers

Slide Potentiometers

General-use

Mixer

## Reference for Hand Soldering

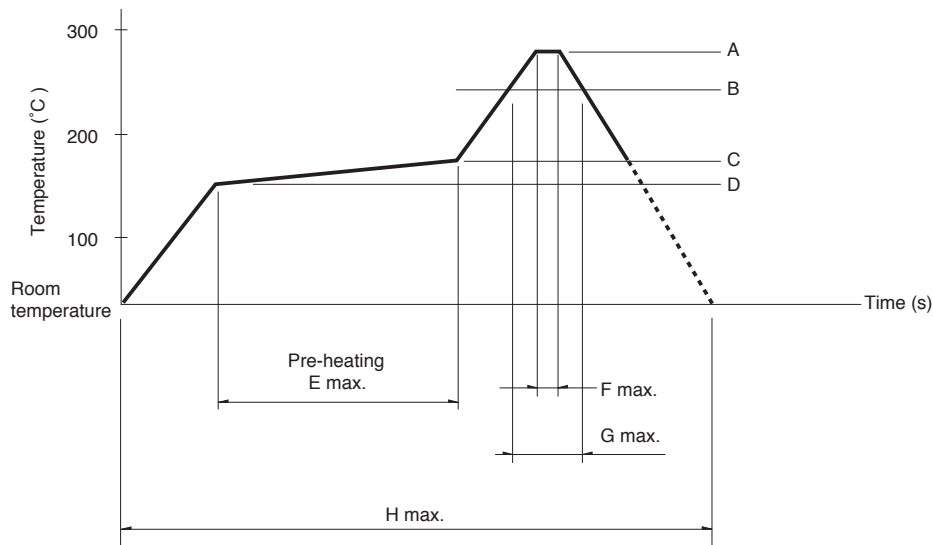
Series	Tip temperature	Duration of Soldering time	No. of solders
RS□□1, RS□□H, RS08U, RS□□K (Standard), RS□□N, RS□□N11S, RS6011□P, RS□□N1□M, RSA0K1□V (Motor terminal)	350°C max.	3s max.	1 time

## Reference for Dip Soldering

Series	Preheating		Dip soldering		Number of soldering
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
RS□□1, RS□□H, 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

- 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.
- The temperatures given above are the maximum temperatures at the terminals of the potentiometer when employing a hot air reflow method. The temperature of the PC board and the surface temperature of the potentiometer may vary greatly depending on the PC board material, its size and thickness. Ensure that the surface temperature of the potentiometer does not rise to 250° C or greater.
- Conditions vary to some extent depending on the type of reflow bath used. Be sure to give due consideration to this prior to use.