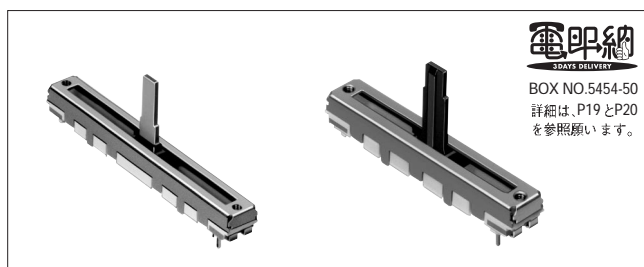


## 標準形スライドボリューム(スーパースライド)®

## Standard Type Slide Potentiometers (SUPER SLIDE)



## ■ 特長

- オートディップ対応が可能です。

## ■ 用途

- 一般民生、車載、産機用などの各種コントロール

## ■ Features

- Supported up to auto dip.

## ■ Applications

- Suitable for various control applications with general consumer electronics products, automotive installation equipment and devices, industrial machines, etc.

## ■ 製品一覧 Products Line

| タイプ<br>Type       | 移動量<br>Travel | 製品名<br>Model | タップ<br>の可否<br>Tap | クリックバラエティ<br>Detent variety   | 直流対応<br>For DC use   | レバー形状<br>Lever style  | 取付板<br>Mounting<br>plate           |
|-------------------|---------------|--------------|-------------------|-------------------------------|--|---|------------------------------------|
| 単連<br>Single-unit | 15mm          | RS15111      | ●                 | 1 (センタ center), 3, 5          | ●<br>DC 10V  | 絶縁レバー<br>Insulated lever<br>A, B, C, D, J-1<br>金属レバー<br>Metal lever<br>4, 6, 9-1, 9-2 | ●<br>P98参照<br>Refer to<br>Page 98. |
|                   | 20mm          | RS20111      |                   | 1 (センタ center), 3, 5, 7       |  |   |                                    |
|                   | 25mm          | RS25111      |                   | 1 (センタ center), 5, 7, 9       |  |   |                                    |
|                   | 30mm          | RS30111      |                   | 1 (センタ center), 5, 7, 11      |  |   |                                    |
|                   | 45mm          | RS45111      |                   | 1 (センタ center), 3, 7, 11, 13  |  |   |                                    |
|                   | 60mm          | RS6011Y      |                   | 1 (センタ center), 7, 11, 13, 21 |  |   |                                    |
| 2連<br>Dual-unit   | 15mm          | RS15112      | ●                 | 1 (センタ center), 3, 5          | ●<br>DC 10V<br>タップ付きは<br>不可<br>Not avail-<br>able with tap | 絶縁レバー<br>Insulated lever<br>A, B, C, D, J-1<br>金属レバー<br>Metal lever<br>4, 6, 9-1, 9-2 | ●<br>P98参照<br>Refer to<br>Page 98. |
|                   | 20mm          | RS20112      |                   | 1 (センタ center), 3, 5, 7       |  |   |                                    |
|                   | 25mm          | RS25112      |                   | 1 (センタ center), 5, 7, 9       |  |   |                                    |
|                   | 30mm          | RS30112      |                   | 1 (センタ center), 5, 7, 11      |  |   |                                    |
|                   | 45mm          | RS45112      |                   | 1 (センタ center), 3, 7, 11, 13  |  |   |                                    |
|                   | 60mm          | RS60112      |                   | 1 (センタ center), 7, 11, 13, 21 |  |   |                                    |



ご使用上の注意  
CAUTION

直流対応品は、抵抗体の仕様が異なるため、ご注文の際はご指定ください。なお、直流対応の最高使用電圧は、10Vとなります。

ます。10Vを超える場合は、ご相談ください。

■ 注記  
Notes

1. リード端子については、移動量30mm、45mmの単連タイプが対応可能です。詳細については、ご相談ください。
2. レバー形状については、P.99をご参照ください。
3. 仕様の詳細については、P.112の共通仕様をご参照ください。
4. スーパースライドは、当社の登録商標です。

For DC use, please so specify because the specification of the resistor is different. The maximum operating voltage for DC use is 10V.

If it exceeds 10V, please consult us.

1. Single-unit type lead terminals with travel of 30mm or 45mm are available. For details, please consult us.
2. For the lever style, see page 99.
3. For details of specifications, please see Common specifications on page 112.
4. SUPER SLIDE is a trademark of ALPS Electric Co., Ltd.

外形図／プリント基板取付穴寸法図 Dimensions and P.C. Board mounting hole details  
(挿入側から見た図 Viewed from the mounting side)

Unit : mm

**単連 (60mm Travelは除く)**  
Single-unit (except 60mm travel)  
RS□□111

回路図 Circuit diagram

**2連 Dual-unit**  
RS□□112  
RS6011Y (①,②,③,④ dummy terminal)

RS60Y11の回路図 Circuit diagram of RS60Y11

2連回路図 Circuit diagram of dual type

注記 Notes

1. 変化特性C,R-D,Eについては、2-4(および②-④)の配置が逆となります。また、4(および④)は、タップ端子を表しています。
  2. 2連タイプでタップ付きの場合は、交流専用となります。
1. As for the variation characteristics C, R-D and E, the layout of "2-4" (and ②-④) is to be reversed. Also, "4" (and ④) represents the tap terminal.
2. Dual type with tap terminals are exclusive for alternating current applications.

取付板付属時のスナップインピッチ寸法図  
Snap-in pitch dimensional diagram when the mounting plate is attached.

(挿入側から見た図 Viewed from mounting side)

Unit : mm

単連  
スナップイン  
取付けタイプ  
Single-unit  
snap-in  
mounting type

| Dimensions Model | A    | B    | C   | D  |
|------------------|------|------|-----|----|
| RS15111          | 12.5 | 7    | 5.5 | 20 |
| RS20111          | 12.5 | 7.5  | 5   | 25 |
| RS25111          | 17.5 | 10   | 7.5 | 30 |
| RS30111          | 22.5 | 12.5 | 10  | 35 |
| RS45111          | 32.5 | 17.5 | 15  | 50 |

2連  
スナップイン  
取付けタイプ  
Dual-unit  
snap-in  
mounting type

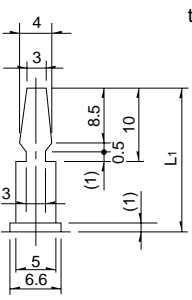
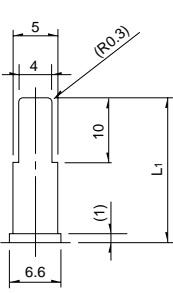
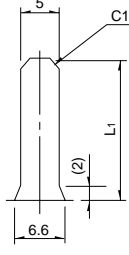
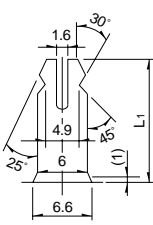
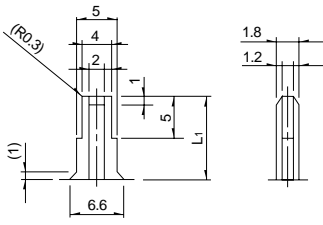
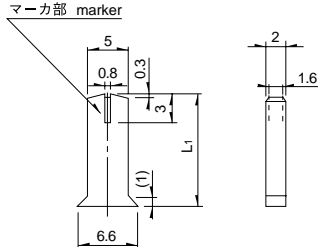
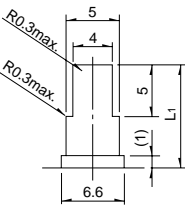
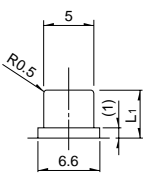
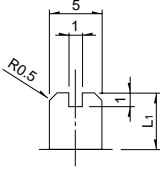
| Dimensions Model | A    | B    | C    | D  |
|------------------|------|------|------|----|
| RS15112          | 12.5 | 7    | 5.5  | 25 |
| RS20112          | 12.5 | 7.5  | 5    | 30 |
| RS25112          | 17.5 | 10   | 7.5  | 35 |
| RS30112          | 22.5 | 12.5 | 10   | 40 |
| RS45112          | 32.5 | 17.5 | 15   | 55 |
| RS60112          | 47.5 | 25   | 22.5 | 70 |

RS6011Y (①,②,③,④ dummy terminal)      単連 Single-unit →



## Standard Type Slide Potentiometers (SUPER SLIDE)

## レバールの種類 Type of lever

Unit : mm

| 形状記号<br>Configuration code | 4<br>(Metal lever)  |    |    | 6<br>(Metal lever)  |    |    | A<br>(Insulated lever)  |    |    |
|----------------------------|---|----|----|---|----|----|---|----|----|
| 寸法<br>Dimensions           |    |    |    |    |    |    |    |    |    |
| 長さ L1<br>Length            | 15  | 20 | 25 | 15  | 20 | 25 | 10  | 15 | 20 |
| 形状記号<br>Configuration code | B<br>(Insulated lever)  |    |    | C<br>(Insulated lever)  |    |    | D<br>(Insulated lever)  |    |    |
| 寸法<br>Dimensions           |   |    |    |  |    |    |   |    |    |
| 長さ L1<br>Length            | 10  | 15 | 20 | 10  | 15 | 20 | 10  | 15 | 20 |
| 形状記号<br>Configuration code | 9-1<br>(Metal lever)  |    |    | 9-2<br>(Metal lever)  |    |    | J-1<br>(Insulated lever)  |    |    |
| 寸法<br>Dimensions           |  |    |    |  |    |    |  |    |    |
| 長さ L1<br>Length            | 10  |    |    | 5   |    |    | 5   |    |    |

注記  
Notes

- ※  部が当社推奨仕様です。
- D形状のレバー部の色調は黒です。マーカー部の色調は、赤、緑、橙、白が対応可能です。
- 仕様の詳細については、P.112の共通仕様をご参照ください。
- 1.※  shows the specification recommended by ALPS.
- 2.The D-type lever is black. Red, green, orange and white markers are available upon request.
- 3.For details of specifications, see the common specifications on page 112.

# 一般形スライドボリューム共通仕様

## Common Specifications for Slide Potentiometers for General-Use

### 機械的特性 Mechanical characteristics

| タイプ<br>Type                            | 標準タイプ<br>Standard type                             | 小形タイプ<br>Miniature type  | スリムタイプ<br>Slim type  | 照光タイプ<br>Illuminated type |  |  |
|--|--|--|--|---------------------------|--|--|
|  |  |  |  | スリム形<br>Slim type         | 単連形<br>Single-unit type                            | 2連形<br>Dual-unit type                              |
| 製品名<br>Model                           | RS□□11□  | RS10F1□□   | RS□□H1□<br>RS□□M11<br>RS10T11  | RS□□J1□                   | RS□□211  | RS□□L12  |
| 作動力<br>Operating force                 | 3 to 25mN<br>{30 to 250gf}                         | 5 to 35mN<br>{50 to 350gf}                                       | 2 to 11mN {20 to 110gf}<br>RS□□M : 1.5 to 11mN {15 to 110gf}<br>RS15T11 : 1 to 9mN {10 to 90gf}                                      |                           | 3 to 25mN<br>{30 to 250gf}                         | 2 to 18mN<br>{20 to 180gf}                         |
| 作動止め強度<br>Stopper strength             | 50N {5kgf}   | レバー形状<br>Lever style<br>A : 25N {2.5kgf}<br>J : 40N {4kgf}       | 30N {3kgf}<br>RS15T : 10N {1kgf}   |                           | 50N {5kgf}   | 40N {4kgf}   |
| レバーの押し引き強度<br>Lever push-pull strength | 50N {5kgf}   | 25N {2.5kgf}   | 30N {3kgf}<br>RS□□M11 : 20N {2kgf}<br>RS15T11 : 10N {1kgf}   |                           | 50N {5kgf}   | 40N {4kgf}   |
| レバーの横振れ<br>Lever wobble (mm)           | $\frac{2(2 \times L)}{20}$<br>(両側)<br>(Both sides) | $2 \left( \frac{2 \times L}{25} \right)$<br>(両側)<br>(Both sides) | 1.6 max. 両側 Both sides<br>RS15T11 : 規定せず<br>RS15T11 is not regulated.  |                           | $\frac{2(2 \times L)}{20}$<br>(両側)<br>(Both sides) | $\frac{2(2 \times L)}{20}$<br>(両側)<br>(Both sides) |
| クリック脱出力<br>Detent slip-out force       | 2 to 20mN<br>{20 to 200gf}                         | 1.5 to 20mN<br>{15 to 200gf}                                     | 0.5 to 8N {5 to 80gf}<br>RS□□M11 : クリック感のあること<br>RS□□M : with click feeling<br>RS15T11 : 規定せず<br>RS15T11 : RS15T11 is not regulated. |                           | 2 to 20mN<br>{20 to 200gf}                         | 1 to 12mN<br>{10 to 120gf}                         |
| レバーの偏心<br>Lever deviation (mm)         | 0.5 max.<br>(片側)<br>(One side)                     |  |  |                           |  |  |

### 電気的特性 Electrical characteristics

|                                       |                              |                 |                              |
|---------------------------------------|------------------------------|-----------------|------------------------------|
| 全抵抗値<br>Total resistance (KΩ)         | 5, 10, 20, 50, 100, 200, 250 | 10, 20, 50, 100 | 5, 10, 20, 50, 100, 200, 250 |
| 全抵抗値許容差<br>Total resistance tolerance | ±20%                         |                 |                              |
| 全抵抗値<br>Total resistance (KΩ)         | A, B, C, D, RD, K, W, M, N   | B, W            | A, B, W                      |
|                                       | A, B, C, D, RD, K, W, M, N   |                 |                              |

### 耐久特性 Durability

|                                |              |             |              |             |              |
|--------------------------------|--------------|-------------|--------------|-------------|--------------|
| しゅう動寿命<br>Sliding service life | 15,000cycles | 5,000cycles | 10,000cycles | 5,000cycles | 10,000cycles |
|--------------------------------|--------------|-------------|--------------|-------------|--------------|

#### 注記 Notes

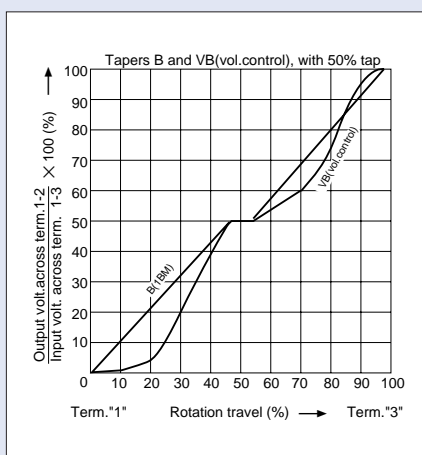
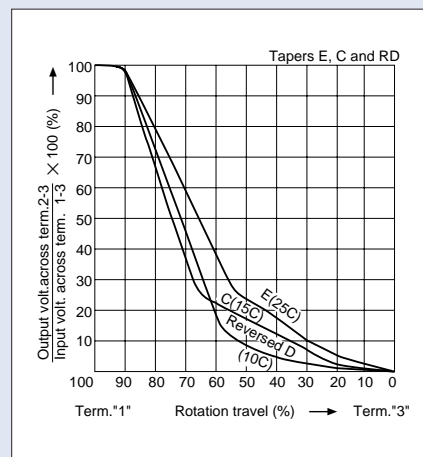
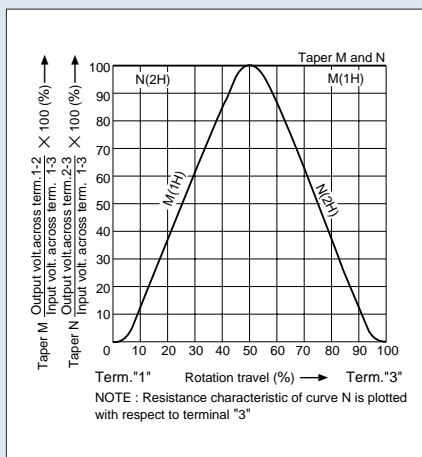
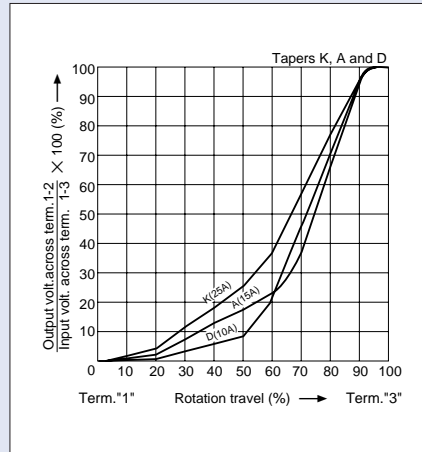
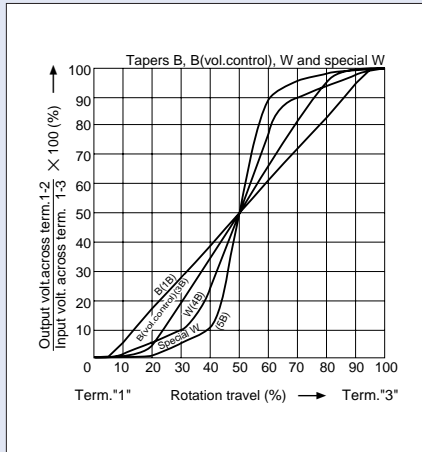
- 上記レバーの横振れのLは測定点を表します。
  - 上記以外の仕様は個別仕様書によります。
- L in the horizontal oscillation of the lever refers to a measuring point.
  - Detailed specifications other than what are listed above should be according to the individual delivery specifications.

# Resistance Taper

## [Resistance Taper]

With the shaft (lever) placed in the specified position, resistance taper shall be determined by measuring the voltage between the specified terminals (between terminals 1 and 2 or between terminals 2 and 3) and calculating the percentage in reference to the voltage between terminals 1 and 3.

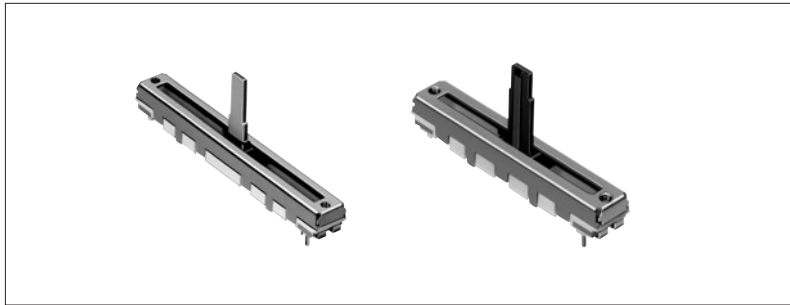
Reference: Standard resistance tapers in reference to rotational angles (travels) are as shown below.



# Standard Type Slide Potentiometer (Super Slide™)

RS□□1 Series

Available in a wide variety; solderable with auto dipping.



Car Use

## Features

- A wide range of products. (stroke length : 15, 20, 25, 30, 45, 60mm)

## Applications

- Contrast control for LCD monitors
- Controls for mixers, mini component stereos and electronic instruments
- Controls for accessories, including heaters, dimmers and wipers in vehicle cabins
- Controls for interphones, fan-heaters and electric carpets

## Typical Specifications

| Items                       | Specifications |
|-----------------------------|----------------|
| Total resistance tolerance  | ±20%           |
| Maximum operating voltage   | 50V AC, 10V DC |
| Operating force             | 0.3 to 2.5 N   |
| Operating life              | 15,000 cycles  |
| Operating temperature range | -25°C to +70°C |

Rotary Potentiometers

Slide Potentiometers

Trimmer Potentiometers

Multi Control Devices

Position Sensors

General-use

Mixer

**Recommended Products List**

**Insulated lever**

| Number of resistor elements | Travel (mm)  | Products No. | Lever types | Length of lever (mm) | Total resistance (kΩ) | Resistance taper | Detent  | Mounting plate | Minimum packing unit (pcs.) | Drawing No. |
|-----------------------------|--------------|--------------|-------------|----------------------|-----------------------|------------------|---------|----------------|-----------------------------|-------------|
| Single-unit                 | 30           | RS301111J00P | J-1         | 5                    | 10                    | 15A              | Without | Without        | 100                         | 1           |
|                             |              | RS30111AJ01R |             |                      |                       | 1B               |         | With           |                             | 2           |
|                             |              | RS301111J00R |             |                      | 50                    | Without          |         | 1              |                             |             |
|                             |              | RS301111J00W |             |                      |                       | 15A              |         | With           |                             | 2           |
|                             | RS30111AJ01K | A            | 10          | 10                   | 1B                    | Without          |         | Without        |                             | 3           |
|                             | RS301111A01G | C            |             |                      |                       | Without          |         | 4              |                             |             |
|                             | RS301111C01L |              |             |                      |                       | 5                |         |                |                             |             |
|                             | RS30111AC00V | 6            |             |                      |                       |                  |         |                |                             |             |
| 45                          | RS45111ABA02 | B            | 5           | 10                   | 1B                    | Without          | With    | 7              |                             |             |
| 30                          | RS30112AC00J | C            |             |                      |                       |                  | 8       |                |                             |             |
| Dual-unit                   | 30           | RS30112AJA02 | J-1         | 5                    | 3B                    |                  |         |                |                             |             |

**Metal lever**

| Number of resistor elements | Travel (mm) | Products No. | Lever types  | Length of lever (mm) | Total resistance (kΩ) | Resistance taper | Detent  | Mounting plate | Minimum packing unit (pcs.) | Drawing No. |      |
|-----------------------------|-------------|--------------|--------------|----------------------|-----------------------|------------------|---------|----------------|-----------------------------|-------------|------|
| Single-unit                 | 15          | RS15111A900B | 9-1          | 10                   | 10                    | 15A              | Without | With           | 100                         | 9           |      |
|                             | 30          | RS30111A9012 |              |                      |                       |                  |         | Without        |                             | 10          |      |
|                             |             | RS3011114A02 | 4            | 15                   | 20                    | 1B               |         | With           |                             | 11          |      |
|                             |             | RS30111A602N | 6            |                      |                       |                  |         | Without        |                             | 12          |      |
|                             | 45          | RS45111A900F | 9-1          | 10                   | 10                    | 15A              |         | With           |                             | 13          |      |
|                             |             | RS4511119A04 |              |                      |                       |                  |         | Without        |                             | 14          |      |
|                             | 60          | RS6011YA600M | 6            | 15                   | 10                    | 1B               |         | With           |                             | 15          |      |
|                             |             | RS6011Y19004 | 9-1          |                      |                       |                  |         | 10             |                             | Without     | 16   |
|                             |             | RS6011Y1600Q | 6            |                      |                       |                  |         | 15             |                             | Without     | 17   |
|                             | Dual-unit   | 45           | RS451121400A | 4                    | 20                    | 20               |         | 15A            |                             | Without     | With |
| RS45112A400G                |             |              | 19           |                      |                       |                  |         |                |                             |             |      |
| 60                          |             | RS60112A600N | 6            | 15                   | 20                    | 15A              | With    | 20             |                             |             |      |
|                             |             | RS60112A600U |              |                      |                       |                  |         |                |                             |             |      |

**Note**

Additional product specifications not included in the above list are also available.

For product specifications, see P.99  
 For other detailed specifications, see P.99  
 For details of lever types, see P.128, 129

# Product Specifications

In addition to the recommended products, the following specifications can also be accommodated.

## Standard Type Slide Potentiometers (Super Slide™) Specifications

| Type        | Travel (mm) | Model   | Center detent | For DC use                       | Mounting plate |
|-------------|-------------|---------|---------------|----------------------------------|----------------|
| Single-unit | 15          | RS15111 | Available     | 10V DC                           | Available      |
|             | 20          | RS20111 |               |                                  |                |
|             | 25          | RS25111 |               |                                  |                |
|             | 30          | RS30111 |               |                                  |                |
|             | 45          | RS45111 |               |                                  |                |
| Dual-unit   | 60          | RS6011Y |               | 10V DC<br>Not available with tap |                |
|             | 15          | RS15112 |               |                                  |                |
|             | 20          | RS20112 |               |                                  |                |
|             | 25          | RS25112 |               |                                  |                |
|             | 30          | RS30112 |               |                                  |                |
|             | 45          | RS45112 |               |                                  |                |
|             | 60          | RS60112 |               |                                  |                |

## Electrical Characteristics

| Total resistance (kΩ)      | 10   | 20 | 50  | 100 | 200 |
|----------------------------|------|----|-----|-----|-----|
| Total resistance tolerance | ±20% |    |     |     |     |
| Resistance taper           | 1B   | 4B | 10A | 15A |     |

## Lever shape and dimensions

| Metal lever |   | Insulated lever |            |     |   |   |    |    |    |
|-------------|---|-----------------|------------|-----|---|---|----|----|----|
| Code        | Dimensions  | Code            | Dimensions |     |   |   |    |    |    |
| 9-2         | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>5</td></tr> </table>                       | L1              | 5          | J-1 | <p>t=2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>5</td></tr> </table>                       | L1  | 5  |    |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 5           |   |                 |            |     |   |   |    |    |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 5           |   |                 |            |     |   |   |    |    |    |
| 9-1         | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>10</td></tr> </table>                      | L1              | 10         | A   | <p>t=2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>10</td></tr> <tr><td>15</td></tr> </table> | L1  | 10 | 15 |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 10          |   |                 |            |     |   |   |    |    |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 10          |   |                 |            |     |   |   |    |    |    |
| 15          |   |                 |            |     |   |   |    |    |    |
| 6           | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>15</td></tr> <tr><td>20</td></tr> </table> | L1              | 15         | 20  | C   | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>10</td></tr> <tr><td>15</td></tr> </table> | L1 | 10 | 15 |
| L1          |   |                 |            |     |   |   |    |    |    |
| 15          |   |                 |            |     |   |   |    |    |    |
| 20          |   |                 |            |     |   |   |    |    |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 10          |   |                 |            |     |   |   |    |    |    |
| 15          |   |                 |            |     |   |   |    |    |    |
| 4           | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>15</td></tr> <tr><td>20</td></tr> </table> | L1              | 15         | 20  |   |   |    |    |    |
| L1          |   |                 |            |     |   |   |    |    |    |
| 15          |   |                 |            |     |   |   |    |    |    |
| 20          |   |                 |            |     |   |   |    |    |    |

## Corresponding specifications

| Resistance taper | 3B, 15C                                   | Lever type  |                                    |    |    |   |    |    |    |
|------------------|---|---|------------------------------------|----|----|---|----|----|----|
|                  |   | B   | D (Marker colour tone: White, Red) |    |    |   |    |    |    |
| Dust cover       | Available                                 | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>10</td></tr> <tr><td>15</td></tr> </table> | L1                                 | 10 | 15 | <p>t=1.2</p> <table border="1"> <tr><td>L1</td></tr> <tr><td>10</td></tr> <tr><td>15</td></tr> </table> | L1 | 10 | 15 |
| L1               |   |   |                                    |    |    |   |    |    |    |
| 10               |   |   |                                    |    |    |   |    |    |    |
| 15               |   |   |                                    |    |    |   |    |    |    |
| L1               |   |   |                                    |    |    |   |    |    |    |
| 10               |   |   |                                    |    |    |   |    |    |    |
| 15               |   |   |                                    |    |    |   |    |    |    |
| Tap              | Available<br>(Only the center-positioned) |   |                                    |    |    |   |    |    |    |

For resistance taper, see P.100

Rotary Potentiometers  
Slide Potentiometers  
Trimmer Potentiometers  
Multi Control Devices  
Position Sensors

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Mixer



# Orders other than recommended products

Specify orders for varieties that are not listed in the Recommended Product List, referring to the following example.

## Sample part number



### Specify the travel distance by symbol

| Travel (mm) | Code | Travel (mm) | Code |
|-------------|------|-------------|------|
| 15          | 15   | 30          | 30   |
| 20          | 20   | 45          | 45   |
| 25          | 25   | 60          | 60   |

### Number of resistor elements

|               |                                |
|---------------|--------------------------------|
| <b>Single</b> | 1 (Enter "Y" for 60 mm travel) |
| <b>Dual</b>   | 2                              |

### Lever type / Length of operation unit (mm)

| Insulated lever |               |        |
|-----------------|---------------|--------|
| Code            | Configuration | Length |
| J1              | J-1           | 5      |
| 0A              | A             | 10     |
|                 |               | 15     |
| 0C              | C             | 10     |
|                 |               | 15     |
| 0B              | B             | 10     |
|                 |               | 15     |

| Metal lever |               |        |
|-------------|---------------|--------|
| Code        | Configuration | Length |
| 91          | 9-1           | 10     |
| 92          | 9-2           | 5      |
| 04          | 4             | 15     |
|             |               | 20     |
| 06          | 6             | 15     |
|             |               | 20     |

### Marker type

| Code | Style | Color | Length |
|------|-------|-------|--------|
| DR   | D     | Red   | 10     |
| DW   |       | White | 15     |

### Length of operation unit

If the length is less than 10 mm, add a "0" before the number. (e.x., 5 mm length = "05")

### Detent

| Code | Detent  |
|------|---------|
| C0   | Without |
| C1   | Center  |

### Mounting plate

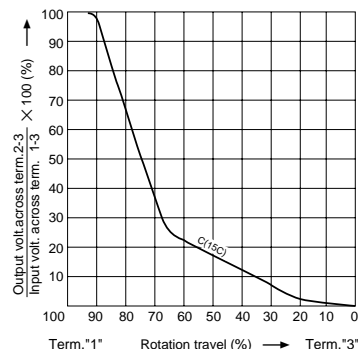
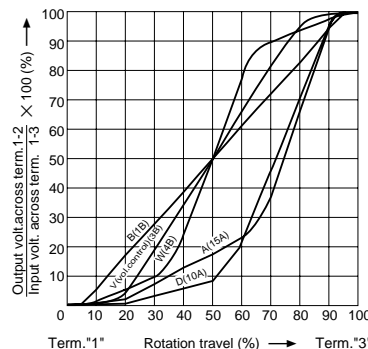
| Code | Mounting plate |
|------|----------------|
| P0   | Without        |
| P1   | With           |

### Total resistance

| Code | Total resistance (kΩ) | Code | Total resistance (kΩ) |
|------|-----------------------|------|-----------------------|
| 103  | 10                    | 104  | 100                   |
| 203  | 20                    | 204  | 200                   |
| 503  | 50                    |      |                       |

### Resistance taper

| Code | Resistance taper |
|------|------------------|
| A    | 15A              |
| B    | 1B               |
| D    | 10A              |
| W    | 4B               |
| V    | 3B               |
| C    | 15C              |



### Note

Shows the specification recommended by us.

| No. | Style | PC board mounting hole dimensions |
|-----|-------|-----------------------------------|
| 1   |       |                                   |
| 2   |       |                                   |
| 3   |       |                                   |
| 4   |       |                                   |

The length of the operating part (L1) can be customized. See P.100

Dimensions

Unit : mm

| No. | Style | PC board mounting hole dimensions |
|-----|-------|-----------------------------------|
| 5   |       |                                   |
| 6   |       |                                   |
| 7   |       |                                   |
| 8   |       |                                   |

The length of the operating part (L1) can be customized. See P.100

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Dimensions

Unit : mm

| No. | Style | PC board mounting hole dimensions |
|-----|-------|-----------------------------------|
| 9   |       |                                   |
| 10  |       |                                   |
| 11  |       |                                   |
| 12  |       |                                   |

The length of the operating part (L1) can be customized. See P.100

Dimensions

Unit : mm

| No. | Style | PC board mounting hole dimensions |
|-----|-------|-----------------------------------|
| 13  |       |                                   |
| 14  |       |                                   |
| 15  |       |                                   |
| 16  |       |                                   |

The length of the operating part (L1) can be customized. See P.100

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**Dimensions**

Unit : mm

| No. | Style | PC board mounting hole dimensions |
|-----|-------|-----------------------------------|
| 17  |       |                                   |
| 18  |       |                                   |
| 19  |       |                                   |
| 20  |       |                                   |

The length of the operating part (L1) can be customized. See P.100

## Products Specifications

| Type         | Standard type | Miniature type | Slim type          |
|--------------|---------------|----------------|--------------------|
| <b>Model</b> | RS□□11□       | RS10F1□        | RS□□H1□<br>RS□□M11 |

### Mechanical Characteristics

|                                    |                         |  |  |  |
|------------------------------------|-------------------------|--|--|--|
| <b>Operating temperature range</b> |                         | -25 °C to +70 °C                           |  |  |
| <b>Solder heat resistance</b>      | <b>Manual soldering</b> | Lower than 350°C for less than 3 seconds   |  |  |
|                                    | <b>Dip soldering</b>    | Lower than 260°C for less than 5 seconds   |  |  |
| <b>Operating force</b>             |                         | 0.3 to 2.5N                                | 0.5 to 3.5N                                | 0.2 to 1.1N<br>RS□□M : 0.15 to 0.8N          |
| <b>Stopper strength</b>            |                         | 50N  | Lever style<br>A : 25N<br>J : 40N          | 30N  |
| <b>Lever push-pull strength</b>    |                         |  | 25N  | 30N<br>RS□□M11 : 20N                         |
| <b>Lever wobble (mm)</b>           |                         | $\frac{2(2 \times L)}{20}$<br>(Both sides) | $\frac{2(2 \times L)}{25}$<br>(Both sides) | 1.6 max. Both sides                          |
| <b>Detent slip-out force</b>       |                         | 0.2 to 2N                                  | 0.15 to 2N                                 | 0.05 to 0.8N<br>RS□□M11 : with click feeling |
| <b>Lever deviation (mm)</b>        |                         | 0.5 max.<br>(One side)                     |  |  |
| <b>Solderability</b>               |                         | 230±5°C、3±0.5s                             |  |  |

### Electrical Characteristics

|                                   |                                |                 |                         |
|-----------------------------------|--------------------------------|-----------------|-------------------------|
| <b>Total resistance (kΩ)</b>      | 10, 20, 50,<br>100, 200        | 10, 20, 50, 100 | 10, 20, 50,<br>100, 200 |
| <b>Total resistance tolerance</b> | ±20%                           |                 |                         |
| <b>Resistance taper</b>           | 15A, 1B, 4B, 10A,<br>(3B, 15C) | 1B, 4B          | 15A, 1B, 3B             |

### Endurance

|                     |               |              |               |
|---------------------|---------------|--------------|---------------|
| <b>Sliding life</b> | 15,000 cycles | 5,000 cycles | 10,000 cycles |
|---------------------|---------------|--------------|---------------|

### Environmental test

|                                  |                              |
|----------------------------------|------------------------------|
| <b>Cold</b>                      | -25°C for 96h                |
| <b>Long-term heat resistance</b> | +70°C for 96h                |
| <b>Moisture resistance</b>       | +40°C, 90 to 95 % RH for 96h |

### Notes

- "L" in the "Lever Wobble" column of the above table indicates the length of lever.
- Specifications other than those listed above can be customized.
- The resistance law specification in ( ) varies individually.

Rotary  
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Potentiometers

Trimmer  
Potentiometers

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