

Slide Potentiometer Standard Type (Super Slide™)

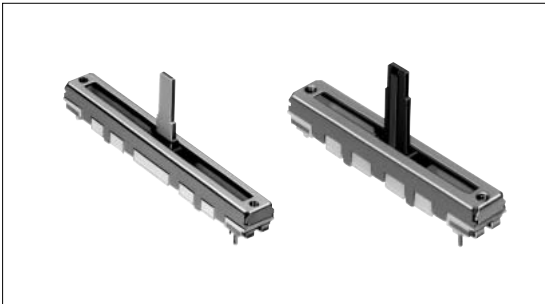
RS 1 Series



Solderable with auto dipping and available in a wide variety.

Rotary
Potentiometers

Slide
Potentiometers



Typical Specifications

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

Product Line

Insulated lever

| Number of resistor elements | Travel (mm) | Lever types | Length of lever(mm) | Total resistance (k) | Resistance taper | Detent | Mounting plate | Minimum packing unit(pcs.) | Products No. | Drawing No. | | | |
|-----------------------------|-------------|-------------|---------------------|-----------------------|------------------|---------|----------------|-----------------------------|---------------|--------------|---------|--------------|-----|
| Single-unit | 30 | J-1 | 5 | 10 | 15A | Without | Without | 1,000 | RS301111J00P | 1 | | | |
| | | | | 50 | 1B | | With | | RS301111AJ01R | 2 | | | |
| | | A | 10 | | 10 | | 1B | | Without | RS301111J00R | 1 | | |
| | | | | Without | | | | | RS301111J00W | | | | |
| | C | With | | RS301111AJ01K | | | | | 2 | | | | |
| | | 45 | | B | | | | | 10 | 1B | Without | RS301111A01G | 3 |
| | C | | | | | | | | | | With | RS301111C01L | 4 |
| | | | | Dual-unit | | | | | | | | 30 | J-1 |
| C | | | RS451111ABA02 | | 6 | | | | | | | | |
| | | | | | | | | | | RS30112AC00J | 7 | | |
| | | | | | | | | | RS30112AJA02 | 8 | | | |

Metal lever

| Number of resistor elements | Travel (mm) | Lever types | Length of lever(mm) | Total resistance (k) | Resistance taper | Detent | Mounting plate | Minimum packing unit(pcs.) | Products No. | Drawing No. |
|-----------------------------|-------------|-------------|---------------------|-----------------------|------------------|---------|----------------|------------------------------|---------------|-------------|
| Single-unit | 15 | 9-1 | 10 | 10 | 15A | Without | With | 1,000 | RS151111A900B | 9 |
| | 30 | | 15 | 20 | 1B | | Without | | RS301111A9012 | 10 |
| | | With | | | | | RS3011114A02 | | 11 | |
| | | | | | | | RS301111A602N | | 12 | |
| | 45 | 9-1 | 10 | 10 | 15A | | Without | | RS451111A900F | 13 |
| | | | | | | | With | | RS4511119A04 | 14 |
| | 60 | 6 | 15 | | 1B | | With | | RS60111YA600M | 15 |
| | | 9-1 | 10 | | | | Without | | RS60111Y19004 | 16 |
| | | 6 | 15 | | | | | | RS60111Y1600Q | 17 |
| Dual-unit | 45 | 4 | 20 | | 20 | 15A | With | | RS451121400A | 18 |
| | | | | | | | | | RS45112A400G | 19 |
| | 60 | 6 | 15 | | | 15A | | RS60112A600N | 20 | |
| | | | | | | | | RS60112A600U | | |
| | | | | | | | | | | |

Note

Products other than those listed in above products are also available. Please contact us for details.

Refer to **P.408** for product varieties.
Refer to **P.408** for configuration details.

Dimensions

Unit:mm

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

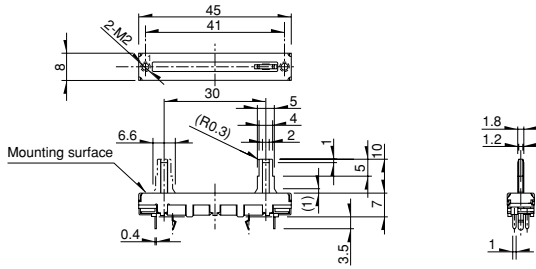
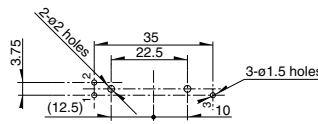
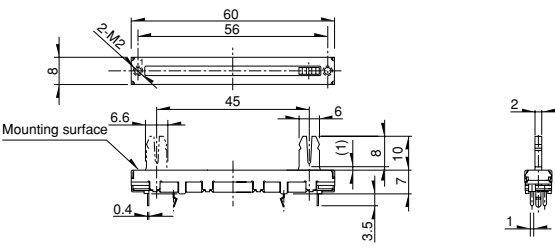
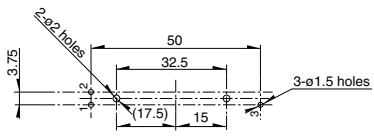
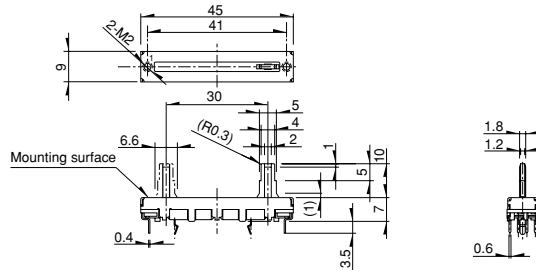
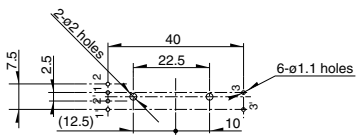
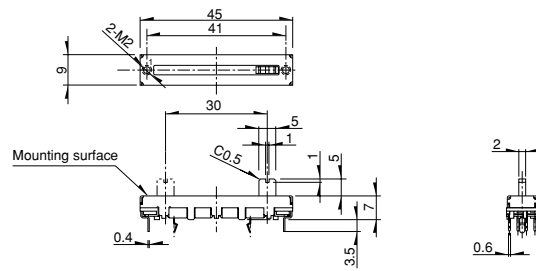
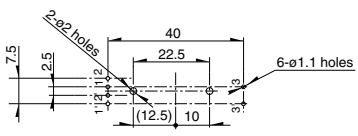
Rotary
Potentiometers
Slide
Potentiometers

General-use
Mixer

The length of the operating part(L₁)can be customized. Refer to P.408 for details.

Dimensions

Unit:mm

| No. | Style | PC board mounting hole dimensions |
|-----|---|---|
| 5 |  <p>Technical drawing of potentiometer style 5. Side view shows dimensions: 45, 41, 30, 5, 4, 2, 1, 10, 7, 3.5, 0.4, 6.6, 8, 2-M2, (R0.3), Mounting surface. Front view shows dimensions: 1.8, 1.2, 1.</p> |  <p>PC board mounting hole dimensions for style 5: 2-φ2 holes, 35, 22.5, 3-φ1.5 holes, (12.5), 10.</p> |
| 6 |  <p>Technical drawing of potentiometer style 6. Side view shows dimensions: 60, 56, 45, 6, 8, 10, 7, 3.5, 0.4, 6.6, 8, 2-M2, Mounting surface. Front view shows dimensions: 2, 1.</p> |  <p>PC board mounting hole dimensions for style 6: 2-φ2 holes, 50, 32.5, 3-φ1.5 holes, (17.5), 15.</p> |
| 7 |  <p>Technical drawing of potentiometer style 7. Side view shows dimensions: 45, 41, 30, 5, 4, 2, 1, 10, 7, 3.5, 0.4, 6.6, 9, 2-M2, (R0.3), Mounting surface. Front view shows dimensions: 1.8, 1.2, 0.6.</p> |  <p>PC board mounting hole dimensions for style 7: 2-φ2 holes, 40, 22.5, 6-φ1.1 holes, (12.5), 10, 7.5, 2.5.</p> |
| 8 |  <p>Technical drawing of potentiometer style 8. Side view shows dimensions: 45, 41, 30, 5, 1, 5, 7, 3.5, 0.4, 6.6, 9, 2-M2, C0.5, Mounting surface. Front view shows dimensions: 2, 0.6.</p> |  <p>PC board mounting hole dimensions for style 8: 2-φ2 holes, 40, 22.5, 6-φ1.1 holes, (12.5), 10, 7.5, 2.5.</p> |

The length of the operating part(L₁)can be customized. Refer to P.408 for details.

Dimensions

Unit:mm

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

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General-use

Mixer

The length of the operating part(L₁)can be customized. Refer to P.408 for details.

Rotary
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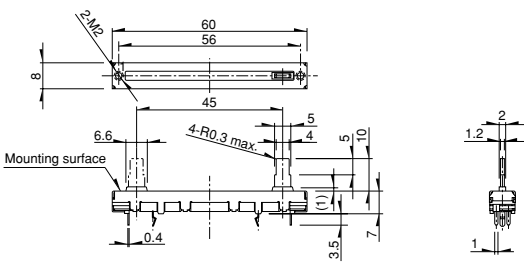
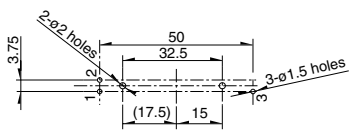
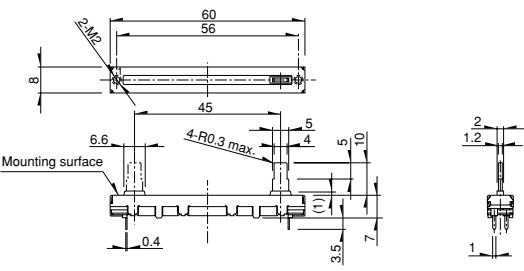
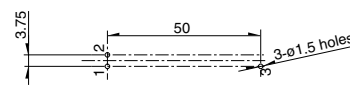
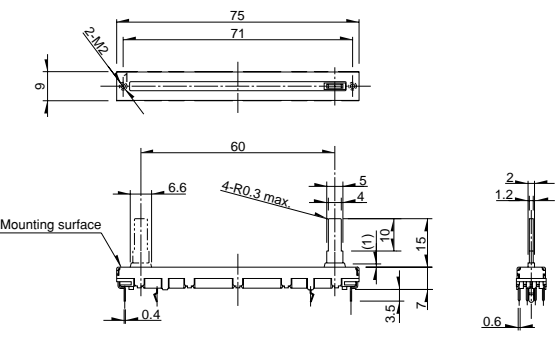
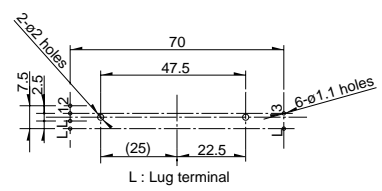
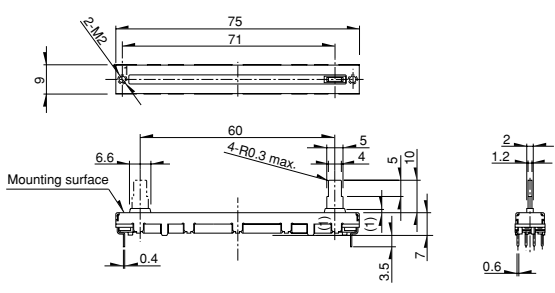
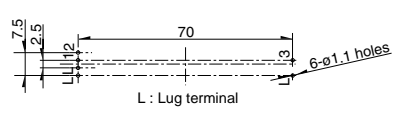
Slide
Potentiometers

General-use

Mixer

Dimensions

Unit:mm

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

The length of the operating part(L) can be customized. Refer to P.408 for details.

Dimensions

Unit:mm

| No. | Style | PC board mounting hole dimensions |
|-----|--|---|
| 17 | <p>Technical drawing of Style 17 potentiometer. Top view shows a rectangular body with dimensions 75 (total length), 71 (length to center), and 60 (length to terminal). Mounting holes are 2-M2. Side view shows a height of 9mm. Front view shows a mounting surface with a 6.6mm offset, a 4-R0.3 max. fillet, and terminal dimensions (5, 4, 10, 15, 7, 3.5, 0.4). A detail view shows terminal dimensions (2, 1.2, 0.6).</p> | <p>PC board mounting hole dimensions for Style 17. The drawing shows a 70mm length with 6-ø1.1 holes. The hole pattern is defined by 7.5, 2.5, 1.2, and 3mm dimensions. A note indicates 'L: Lug terminal'.</p> |
| 18 | <p>Technical drawing of Style 18 potentiometer. Top view shows a rectangular body with dimensions 60 (total length), 56 (length to center), and 45 (length to terminal). Mounting holes are 2-M2. Side view shows a height of 9mm. Front view shows a mounting surface with a 6.6mm offset, a 3mm offset to the terminal, and terminal dimensions (5, 4, 8.5, 10, 20, 7, 3.5, 0.4). A detail view shows terminal dimensions (2, 1.2, 0.6).</p> | <p>PC board mounting hole dimensions for Style 18. The drawing shows a 55mm length with 6-ø1.1 holes. The hole pattern is defined by 7.5, 2.5, 1.2, and 3mm dimensions.</p> |
| 19 | <p>Technical drawing of Style 19 potentiometer. Top view shows a rectangular body with dimensions 60 (total length), 56 (length to center), and 45 (length to terminal). Mounting holes are 2-M2. Side view shows a height of 9mm. Front view shows a mounting surface with a 6.6mm offset, a 3mm offset to the terminal, and terminal dimensions (5, 4, 8.5, 10, 20, 7, 3.5, 0.4). A detail view shows terminal dimensions (2, 1.2, 0.6).</p> | <p>PC board mounting hole dimensions for Style 19. The drawing shows a 55mm length with 2-ø2 holes and 6-ø1.1 holes. The hole pattern is defined by 7.5, 2.5, 1.2, 32.5, 17.5, 15, and 3mm dimensions.</p> |
| 20 | <p>Technical drawing of Style 20 potentiometer. Top view shows a rectangular body with dimensions 75 (total length), 71 (length to center), and 60 (length to terminal). Mounting holes are 2-M2. Side view shows a height of 9mm. Front view shows a mounting surface with a 6.6mm offset, a 4-R0.3 max. fillet, and terminal dimensions (5, 4, 10, 15, 7, 3.5, 0.4). A detail view shows terminal dimensions (2, 1.2, 0.6).</p> | <p>PC board mounting hole dimensions for Style 20. The drawing shows a 70mm length with 2-ø2 holes and 6-ø1.1 holes. The hole pattern is defined by 7.5, 2.5, 1.2, 47.5, (25), 22.5, and 3mm dimensions.</p> |

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General-use
Mixer

The length of the operating part(L;)can be customized. Refer to P.408 for details.

Product Varieties

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

Travel Distance Variety

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

Total Resistance Variety

| | | | | | |
|-----------------------|----|----|----|-----|-----|
| Total resistance(k) | 10 | 20 | 50 | 100 | 200 |
|-----------------------|----|----|----|-----|-----|

Resistance Taper

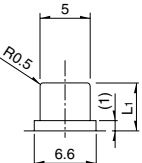
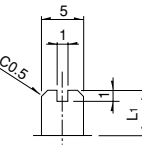
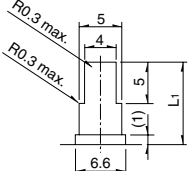
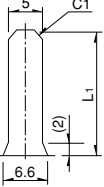
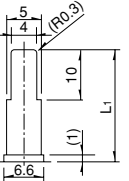
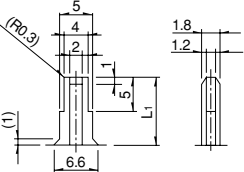
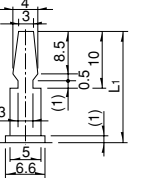
| | | | | |
|------------------|----|----|-----|-----|
| Resistance taper | 1B | 4B | 10A | 15A |
|------------------|----|----|-----|-----|

Note

DC(10VDC) is also available.(Tapped types are not available)


Lever Types

Unit:mm

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

Corresponding Specifications

Unit:mm

| Resistance taper | 3B, 15C | Insulated lever configuration | | | |
|------------------|---|---|--|----------------|----|
| | | B | | | |
| Dust cover | Available |  | t=1.2 | | |
| Tap | Available (Only the center-positioned) | | <table><tr><td>L₁</td></tr><tr><td>10</td></tr><tr><td>15</td></tr></table> | L ₁ | 10 |
| L ₁ | | | | | |
| 10 | | | | | |
| 15 | | | | | |

Terminal Layout/Circuit Diagram

| | | |
|------------------------|---|----------------------|
| <div>Single-unit</div> | <div>Dual-unit (with lug terminal X RS6011Y only)</div> <div>L : Lug terminal</div> | <div>Dual-unit</div> |
|------------------------|---|----------------------|

Note

marked are specifications recommended by ALPS.

Refer to P.408, 502 for resistance taper.

Orders Other Than Recommended Products

When ordering product varieties that are not listed in the Product Line, please specify by referring to the below example.

Sample Part Number



Specify the travel distance from the below codes.

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

Number of resistor elements

| | |
|--------|--------------------------------|
| Single | 1 (Enter "Y" for 60 mm travel) |
| Dual | 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 |
| | | 15 |
| 04 | 4 | 20 |
| | | 15 |
| 06 | 6 | 20 |

Length of operation unit

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

Detent

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

Mounting plate

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

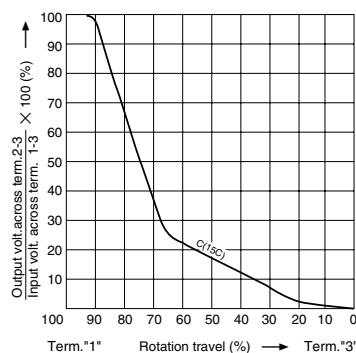
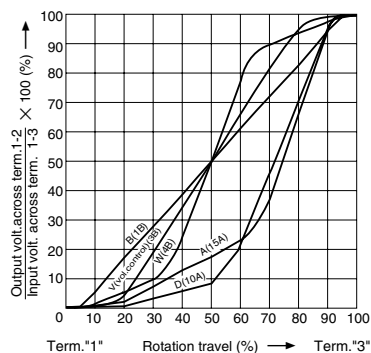
Total resistance

| 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 |

B: For tone & general
V: For vol.








Note

marked are specifications recommended by ALPS.

Rotary
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List of Varieties

| Type | | Super Slide™ | | Slim Slide™ (Slim4) | | | | Slim Slide™ (Low-Profile) | |
|-----------------------------|-----------------------------------|---|--|--|--|---|--|---|---|
| | | RS | 11 | RS | | H1 | | RS | M11 |
| photo | |  | |  | |  | |  |  |
| Travel(mm) | | 15(RS15111) 20(RS20111) 30(RS30111) 45(RS45111) 60(RS6011Y) | 20(RS20112) 30(RS30112) 45(RS45112) 60(RS60112) | 15(RS15H111) 15(RS15H113) 20(RS20H111) 20(RS20H113) 30(RS30H111) | 15(RS15H121) 20(RS20H123) 30(RS30H121) | 15(RS15H11A) 20(RS20H11A) 20(RS20H11C) 30(RS30H11A) | 15(RS15H12A) 20(RS20H12A) 30(RS30H12A) | 15(RS15M111) 20(RS20M111) 20(RS20M113) | 15(RS15M11A) 20(RS20M11A) |
| Number of resistor elements | | Single-unit | Dual-unit | Single-unit | Dual-unit | Single-unit | Dual-unit | Single-unit | |
| Direction of lever | | Vertical | | | | Horizontal | | Vertical | Horizontal |
| Electrical Performance | Total resistance(k) | 10, 20, 50, 100, 200 | | 5, 10, 20, 50, 100 200, 250 | | | | | |
| | Resistance taper | 15A, 1B, 4B, 10A, 3B, 15C | | 15A, 1B, 3B | | | | | |
| Mechanical Performance | Operating force | 0.3 to 2.5N | | 0.2 to 1.1N | | | | 0.15 to 0.8N | |
| | Stopper strength | 50N | | 30N | | | | | |
| | Lever push-pull strength | | | 30N | | | | 20N | |
| | Lever wobble(mm) Both sides | $\frac{2 \times L}{20}$ | | 1.6 max. | | | | | |
| | Detent slip-out force | Operating force+(0.2 to 2N) | | Operating force+(0.05 to 0.8N) | | | | With detent feeling | |
| | Lever deviation(mm) One side | 0.5 max. | | | | | | | |
| Solder heat resistance | Manual soldering | 350 max. 3s max. | | | | | | | |
| | Dip soldering | 260 max. 5s max. | | | | | | | |
| Environmental Performance | Cold | - 30 ± 2 for 96h | | | | | | | |
| | Dry heat | 70 ± 2 for 96h | | | | | | 70 ± 2 for 240h | |
| | Damp heat | 40 ± 2 , 90 to 95%RH for 96h | | | | | | | |
| Page | | 402 | | 410 | | | | 416 | |

Rotary Potentiometers

Slide Potentiometers

General-use

Mixer

Slide Potentiometers Cautions420, 421

Notes

1. "L" in the "Lever Wobble" column of the above table indicates the length of lever.
2. Products other than those listed in the above list are also available. Please contact us for details.
3. The resistance taper specification in () are individually defined.
4. 「RS」 indicates travel.

Mouser Electronics

Authorized Distributor

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ALPS:

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