

Miniature Type Slide Potentiometer (10mm Size)

RS10F Series

Compact type with a total length of 16mm for 10mm travel.

Rotary
Potentiometers

Slide
Potentiometers

Trimmer
Potentiometers

Multi Control
Devices

Position Sensors

General-use

Mixer



Car Use

Features

- Insert molding of a resistor has improved reliability and anoperational feel.
- Available with center detent.

Applications

- Tone controls and balance controls for car audio systems
- Sound volume and image quality controls for telephone and interphone
- Controls for refrigerators

Typical Specifications

Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	50V AC, 10V DC
Operating force	0.5 to 3.5 N
Operating life	5,000 cycles
Operating temperature range	−20°C to +70°C

Recommended Products List

Number of resistor elements	Products No.	Lever type	Length of lever (mm)	Total resistance (kΩ)	Resistance taper	Detent	Minimum packing unit (pcs.)	Drawing No.
Single-unit	RS10F111A006	J	10	10	1B	Without	100	1
Dual-unit	RS10F121A00F		5	100				2
	RS10F121A033	A	10	50				3

Note

Additional product specifications in response to those not included in the above recommended products are also available.

For product specifications, see **P.107**
For other detailed specifications, see **P.107**
For details of lever types, see **P.128, 129**

Product Specifications

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

Miniature Type Slide Potentiometer (10mm Size) Specifications

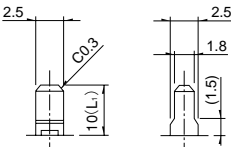
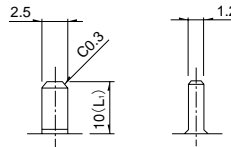
Type	Travel (mm)	Model	Center detent	For DC use
Single-unit	10	RS10F11	Available	10V DC
Dual-unit		RS10F12		

Electrical Characteristics

Total resistance (k Ω)	10	20	50	100
Total resistance tolerance	$\pm 20\%$			
Resistance taper	1B		4B	

Lever Types

Unit : mm

Configuration code	A		J	
Dimensions				
Length L ₁	5	10	5	10

Note

Additional product specifications not included in the above list are also available. Contact us for details.

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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

R	S	1	0	F	1	2	—	J	0	5	—	C	0	—	B	1	0	3
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Number of resistor elements

Single	1
Dual	2

Style of operation unit

Style
A
J

Length of operation unit

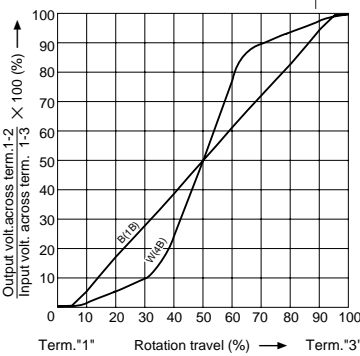
Code	Length
05	5
10	10

Detent

Code	Detent
C0	Without
C1	Center

Resistance taper

Code	Resistance taper
B	1B
W	4B

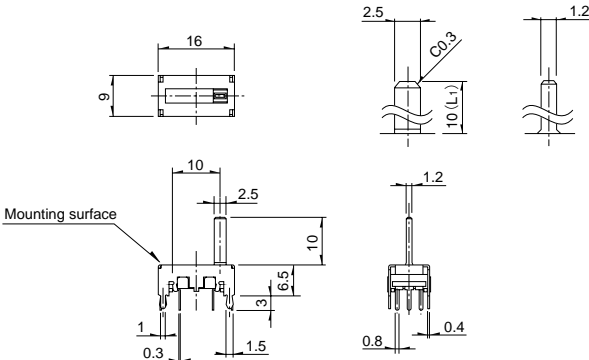
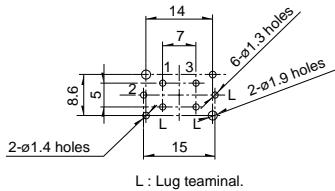
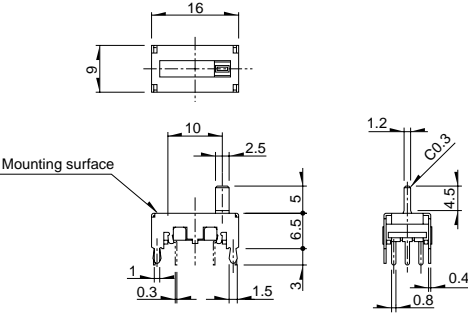
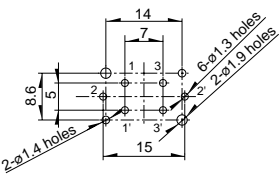
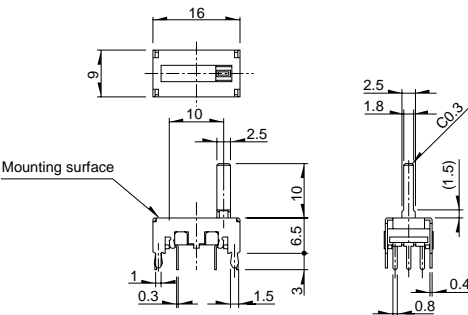
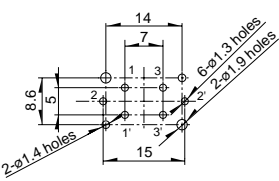


Total resistance

Code	Total resistance (kΩ)	Code	Total resistance (kΩ)
103	10	503	50
203	20	104	100

Note

Shows the specification recommended by us.

Dimensions		Unit : mm
No.	Style	PC board mounting hole dimensions
1	 <p>Technical drawings for Style 1 potentiometer. Top view shows a 16mm wide body with a 9mm high mounting tab. Side view shows a 10mm wide base with a 2.5mm high mounting tab. Front view shows a 10mm wide base with a 2.5mm high mounting tab. Mounting surface is indicated. Dimensions include 16, 9, 10, 2.5, 10, 6.5, 1, 0.3, 1.5, 3, 1.2, 0.8, 0.4, 2.5, 10 (L1), C0.3, and 1.2.</p>	 <p>PC board mounting hole dimensions for Style 1 potentiometer. The diagram shows a 14mm wide mounting area with a 7mm wide central hole. There are 6-ø1.3 holes and 2-ø1.9 holes. The distance between the mounting holes is 15mm. The distance between the mounting holes is 8.6mm. The distance between the mounting holes is 5mm. The distance between the mounting holes is 2-ø1.4 holes. L : Lug terminal.</p>
2	 <p>Technical drawings for Style 2 potentiometer. Top view shows a 16mm wide body with a 9mm high mounting tab. Side view shows a 10mm wide base with a 2.5mm high mounting tab. Front view shows a 10mm wide base with a 2.5mm high mounting tab. Mounting surface is indicated. Dimensions include 16, 9, 10, 2.5, 5, 6.5, 1, 0.3, 1.5, 3, 1.2, 0.8, 0.4, 2.5, C0.3, 4.5, and 1.2.</p>	 <p>PC board mounting hole dimensions for Style 2 potentiometer. The diagram shows a 14mm wide mounting area with a 7mm wide central hole. There are 6-ø1.3 holes and 2-ø1.9 holes. The distance between the mounting holes is 15mm. The distance between the mounting holes is 8.6mm. The distance between the mounting holes is 5mm. The distance between the mounting holes is 2-ø1.4 holes.</p>
3	 <p>Technical drawings for Style 3 potentiometer. Top view shows a 16mm wide body with a 9mm high mounting tab. Side view shows a 10mm wide base with a 2.5mm high mounting tab. Front view shows a 10mm wide base with a 2.5mm high mounting tab. Mounting surface is indicated. Dimensions include 16, 9, 10, 2.5, 10, 6.5, 1, 0.3, 1.5, 3, 1.2, 0.8, 0.4, 2.5, C0.3, 1.8, and 1.5.</p>	 <p>PC board mounting hole dimensions for Style 3 potentiometer. The diagram shows a 14mm wide mounting area with a 7mm wide central hole. There are 6-ø1.3 holes and 2-ø1.9 holes. The distance between the mounting holes is 15mm. The distance between the mounting holes is 8.6mm. The distance between the mounting holes is 5mm. The distance between the mounting holes is 2-ø1.4 holes.</p>

Rotary Potentiometers

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The length of the operating part (L1) can be customized. See P.107

Products Specifications

Type	Standard type	Miniature type	Slim type
Model	RS□□11□	RS10F1□	RS□□H1□ RS□□M11

Mechanical Characteristics

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

Electrical Characteristics

Total resistance (kΩ)	10, 20, 50, 100, 200	10, 20, 50, 100	10, 20, 50, 100, 200
Total resistance tolerance	±20%		
Resistance taper	15A, 1B, 4B, 10A, (3B, 15C)	1B, 4B	15A, 1B, 3B

Endurance

Sliding life	15,000 cycles	5,000 cycles	10,000 cycles
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Environmental test

Cold	-25°C for 96h
Long-term heat resistance	+70°C for 96h
Moisture resistance	+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.