11mm Size Metal Shaft Low-profile Potentiometer

RK117 Series

7.55mm high, featuring a 1.5mm travel push-on switch.

Potentiometers

Slide Potentiometers

Trimmer

Potentiometers

Multi Control Devices



Metal Shaft

Insulated Shaft

Knob Operating





Features

- Low-profile (only 7.55mm in height) with a 1.5mm travel push-on switch.
- Rear mounting configuration permits direct mounting on the front side of a PC board.
- Solderable with auto dipping.
- The center control part can have up to 41 detents.

Applications

- Sound volume, quality and balance controls for car audio systems and other audio players.
- Controls for accessories including dimmers and wipers in vehicle cabins.
- Level controls for communication devices including transceivers.
- Controls for home appliances.

Typical Specifications

Items	Specifications
Total resisitance tolerance	±20%
Maximum operating voltage	50V AC
Total rotational angle	300 +10°
Rotational torque	2 to 25 mN∙m
Operating life	15,000 cycles
Operating temperature range	−10°C to +70°C

Recommended Products List Single-shaft without switch type

Number of resistor elements	Mounting direction	Products No.	Shaft type	Length of the shaft (mm)	Center detent	Total resistance (k Ω)	Resistance taper	Minimum packing unit (pcs.)	Drawing No.							
		RK117111000N			Without	10	1B									
		RK1171110W04		15		10	15	ı	,							
Single-unit	Vertical	RK1171110W0D	Flat	Flat	- Flat	Flat	Flat	Flat	Flat	Flat	15	Without	20	15A	100	'
Single-unit	type	RK1171110W0L									riai		With	50		100
	RK1171110W03 20	20	\A(''.1 1	10	1B		2									
		RK117111000A		20	Without	20]		2							

Slide **Potentiometers** Trimmer Potentiometers

Multi Control Devices **Position Sensors**

Metal **Shaft**

Insulated Shaft Knob

Operating

Recommended Products List

Single-shaft push-on (0.5mm travel)switch type

Number of resistor elements	Mounting direction	Products No.	Shaft type	Length of the shaft (mm)	Center detent	Total resistance (k Ω)	Resistance taper	Minimum packing unit (pcs.)	Drawing No.
Single-unit	Vertical	RK117111400C	Flat	20	Without	10	1B	100	3
Single-unit type		RK1171114D01	rial	20	With		I I B	100	

Single-shaft push-on (1.5mm travel)switch type

Number of resistor elements	Mounting direction	Products No.	Shaft type	Length of the shaft (mm)	Detent	Total resistance (k Ω)	Resistance taper	Minimum packing unit (pcs.)	Drawing No.
Single-unit	Vertical type	RK1171114V02	Flat	15	41points	50	1B	100	4

Note

Additional products other than the above recommended products are available. For inquiries, contact our Sales Department.

Product Specifications

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

■ Total Resistance Variety

Total resistance (kΩ)	10	20	50
-----------------------	----	----	----

Resistance Taper

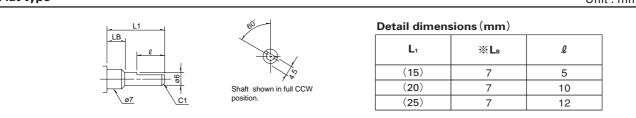
Resistance taper 15A 1B	
-------------------------	--

Detent and Attached switch

Variety	Detent			Attached switches travel
Single-shaft, Single-unit	Without	Center	41	0.5, 1.5mm

Dimensions of Shaft

Flat type Unit: mm



Note

%LB is only available in 7mm, and does not support M7 (with screws).

Specification for Switch

Mechanical Characteristics

Chageover torque Chageover angle Switch type Pole-position Rating (Operating force) (travel) (mm) 5R4411 0.5 6±3N Momentary SPST 3A 16V DC push type 5R4511 5±2N 1.5

Electrical Characteristics

Model	Model Contact resistance		Insulation resistance	Voltage proof
5R4411, 5R4511	100m Ω max.	Measured by a 1A 5V DC voltage drop method.	$100 M\Omega$ min. Measured with a 250V DC megger.	300V AC 1 minute min.

Durability

The switch under a rated resistive load shall be subjected to a total of 10,000 cycles **Operating life** of operation at a speed of 600 to 1,000 cycles per hour. under load The contact resistance after testing should not exceed $200 m\,\Omega$.

Insulated

Shaft

Metal

Shaft

Slide

Trimmer Potentiometers

Potentiometers

Multi Control **Devices Position Sensors**

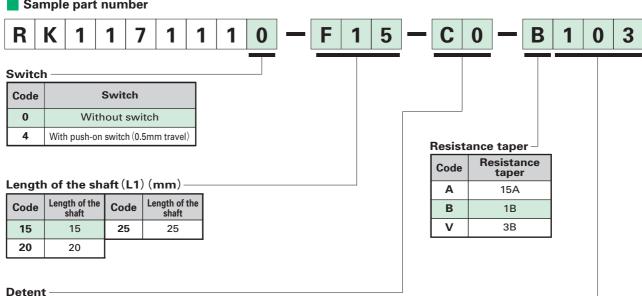
Knob Operating Note

The operating current should be 10mA or greater.

Orders other than for recommended products

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

Sample part number



C0 Without 41 41 C1 Center	Code	Detent	Code	Detent
C1 Center	C0	Without	41	41
	C1	Center		

Total resistance

Code	Total resistance $(\mathbf{k}\Omega)$	Code	Total resistance $(\mathbf{k}\Omega)$
103	10	503	50
203	20		

- Shows the specification recommended by us.
- 2. Please specify if you need a 1.5mm push-on switch.

Dimensions Unit: mm

No.	Model	Style	PC board mounting hole dimensions
	Single-shaft, single-unit		(Viewd from mounting side)
1	RK1171110	Mounting surface 20.3 (15) 3.5 7 5 4 6 11.7 123 Shaft shown in full CCW position	11.1 1.8 9.2 3-91 holes
2	Single-shaft, single-unit RK1171110	Mounting surface 25.3 (20) 3.5 3.5 7 10 9 11,7 123 Shaft shown in full CCW position	11.1 1.8 9 2 3-ø1 holes
3	Single-shaft, single unit with push-on switch travel 0.5mm RK1171114-5R4411	Mounting surface 26.5 (20) 0.5 Switch travel 11.7 Switch travel 22.3 Shaft shown in full CCW position	11.1 5 1.8 9. 9. 5 5-ø1 holes
4	Single-shaft, single unit with push-on switch travel 1.5mm RK1171114-5R4511	Mounting surface 22.55 Switch travel 3.5 7 5 7 1.5	11.1 5 1.8 2 2 2 2 5 5-Ø1 holes

Slide Potentiometers

Trimmer Potentiometers

Multi Control

Devices

Position Sensors

Metal Shaft

Insulated Shaft

Knob Operating