

RK45B RK45C

45mm Size LED Illuminated Ring Type

This LED illuminated ring potentiometer is best suited for knob design of various set devices



Typical Specifications



Items	Specifications	
	RK45B	RK45C
Contact resistance	±20%	
Maximum operating voltage	50V AC, 30V DC	
Detent torque	180° ±5° (Customizable up to 270°)	220° ±5° (Customizable up to 290°)
Operating life	30,000 cycles	
Operating temperature range	-40°C to +85°C	

Product Line

Total resistance	Resistance taper	Number of positions	Rotational angle	Detent torque (mN · m)	LED	Minimum order unit (pcs.)		Product No.	Drawing No.
						Japan	Export		
5kΩ	B	8	180° ±5°	55±20	Red	200	200	RK45B1A00001	1
		17		40±16				RK45B1A00002	2
							220° ±5°		400

Notes

1. Other varieties are also available. Please inquire.
2. We can also provide LED colors other than the above mentioned. Please contact us if required.

Packing Specifications

Tray

Products No.	Number of packages (pcs.)		Export package measurements (mm)
	1 case / Japan	1 case / export packing	
RK45B	200	200	540×360×205
RK45C	200	400	540×360×380

*Products marked with a are not recommended for new designs

Refer to P.383 for soldering conditions.

*Products marked with a  are not recommended for new designs

■ Dimensions

Unit:mm

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

Rotary Potentiometers
 Slide Potentiometers
 Metal Shaft
 Insulated Shaft
 Knob Operating
 Through Shaft Type
 Ring Type

Ring Type Potentiometers / Soldering Conditions

■ Reference for Manual Soldering








Series	Tip temperature	Soldering time	No. of solders
RK39A, RK45B, RK45C	350°C max.	3s max.	1 time

■ Reference for Dip Soldering

Series	Preheating		Dip soldering		No. of solders
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
RK39A, RK45B, RK45C	100°C max.	2min. max.	260°C max.	5s max.	2 time max.

Ring Type Potentiometers

List of Varieties

Type		39mm size	45mm size	
Series		RK39A	RK45B	RK45C
		Single-unit	Single-unit	Single-unit
Photo			 	
Features		LED illuminate		
Dimensions (mm)	W	39	45	
	D	39.5	45.5	
	H	8.5	9.5	
Operating temperature range		-40°C to +85°C		
Operating life		30,000 cycles		
Automotive use		●	●	●
Life cycle				
Electrical performance	Total resistance (k Ω)	5		
	Resistance taper	B		
	Rated power	0.05W		
	Insulation resistance	10MΩ min. 50V DC		
	Voltage proof	50V AC for 1minute		
Mechanical performance	Detent torque	40±16mN·m 50±20mN·m	55±20mN·m 40±16mN·m	40±16mN·m
	Number of positions	6, 17	8, 17	17
	Stopper strength	1N·m		
	Push-pull strength	100N (Push), 50N (Pull)		
	Vibration	10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2 hours respectively		
Terminal type		Insertion		
Page		381	382	

Ring Type Potentiometers Soldering Conditions	383
Potentiometers Cautions	418
Potentiometers Measurement and Test Methods	420
Potentiometers Resistance Taper	422

Note

● Indicates applicability to all products in the series.

*Products marked with a  are not recommended for new designs