

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 | | |
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| | |
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Note

● Indicates applicability to all products in the series.

*Products marked with a  are not recommended for new designs

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