High Bright LED Lamps

LE Series



Features

- The high brightness LED provides brightness equal to that of incandescent lamps.
- Using six different luminescence colors in combination offers vivid color lighting, namely red, green, orange, yellow and blue, which are available respectively.
- With the color adaptor, the color emission is easily identified.
- Efficient power source consumption ranging from 0.3 ~ 0.7W of energy.
- Unlike incandescent lamps, the long lasting lives greatly reduce maintenance.
- Available wide variety of base shapes makes it suitable for a various kinds of indicators.
- Can be used directly under the rated voltage and withstands surges and noises, because all standard lamps are equipped with internal resistors.
- A wider operating voltage range due to the new CV system (Constant voltage and current control), totally different from the conventional resistor-control type, which keeps trouble-free constant current consumptions against increases of voltage and temperature.



- The LED works on a few mill amperes. Accordingly, when used in a circuit with induced or leakage current, the LED may be unintentionally lit. To prevent this error, insert a resistor in parallel across the indicator terminals.
 Be careful with the polarities of LE-4.2A, and LE-6.5B, because they do not have a protection against incorrect
- insertion.
 Because a hybrid IC is used in the CV system, the system may be deteriorated or damaged when used in a circuit with switching surges or induced stroke surges. For the countermeasures, a surge protection element such as a varistor or a surge absorber should be connected across the indicator terminals.
- Unless otherwise mentioned, all dimensions are indicated in "mm" in this book.



Model Designation





Ratings

Item Model	Rated Voltage	Forward Current (Ta=25°C)	Base Shape	Number of LED Elements	Weight	Example of Compatible Model
LE-4.2A	12V DC±10%	15mA	Bi-pin base	4		
	24V DC±10%	14mA				NP-100
LE-5A	12V DC±10%	18mA	- Stepped base	4	Approx. 0.7g	KP-164
	24V DC±10%	14mA				
LE-5.5MB	24V AC/DC±10%	10mA	Midget flanged base		Approx. 1.2g	-
LE-6.5B	12V DC±10%	25mA	Slide base	6	Approx. 1.2g	GP-202/204 GP-2N
	24V DC±10%	11mA				
LE-6.5D	110V AC/DC	10m			Approx. 2g	GP-202/204 GP-2N
	(90~125V AC/DC)	TOTTA				
LE-9SD	18V AC/DC±10%	13mA	BA9S base	3 (Red, orange, yellow) 1 (Green, blue)	Approx 2.8g	_
	24V AC/DC±10%					
	100/110V AC/DC±10%	C Em A				
	(90~121VAC/DC)	0.5IIIA				
LE-10D	18V AC/DC±10%	13mA	E-10 base		Approx 2.5g	KP-142
	24V AC/DC±10%					
	100/110V AC/DC±10%	6.5mA				
	(90~121VAC/DC)					
LE-12D	18V AC/DC±10%	13mA	E-12 base		Approx. 4g	_
	24V AC/DC±10%					
	100/110V AC/DC±10%	6.5mA				
	(90~125V AC/DC)					
LE-2001A	24V AC/DC±10%	51mA		Red: 18 Other: 30	34.5g/18 elements 35g/30 elements	KH-2001B KH-2010
	100/110V AC/DC±10%	17mA				
LE-88A	24V AC/DC±10%	26mA	Dedicated base	24	Approx. 25g	KH-88H·N
	100/110V AC/DC±10%	6.5mA				
	125V AC/DC±10%	6mA				

Production on orders.

 \cdot Operating environment: -10 \sim 40°C, 45 \sim 85% RH (No freezing or condensation)

· Storage temperature: -25 ~ 85°C (LE-4.2A, LE-4.6A, LE-5A)

-25 ~ 75°C (Other models)

Appearance, Dimensions and Circuit Diagram





■ Appearance, Dimensions and Circuit Diagram





■ Appearance, Dimensions and Circuit Diagram





Guide for Handling

- When installing either of the LE-4.2A, LE-4.5B, LE-4.6A/B or LE-6.5B, be careful with the polarities because those models are not provided with a protection against incorrect insertion.
- · Examples of uses for LE-6.5D / 9SD / 10D / 12D of 110V AC/DC types



- An incandescent lamp can be replaced with the LED lamp of LE-6.5D / 9SD / 10D / 12D in the CV type without need for replacing the existing resistor.
- Using the resistor over $1K\Omega$ will make the LED current too small to light up in the enough brightness.
- Example of LE-88A assembly



Option

Removing Tool for LE-88A

▼ KX-8

Weight: 12g



