

# Specification for approval

CUSTOMER NAME: \_\_\_\_\_

DIRECTOR: \_\_\_\_\_ TITLE: \_\_\_\_\_

CUSTOMER PART NO.: \_\_\_\_\_

PART NUMBER: **IE-3535R-SB-L-CE** REVISION: **2.0**

ISSUE DATE: **2014/01/08** RETURN DATE:    /    /



**Features**

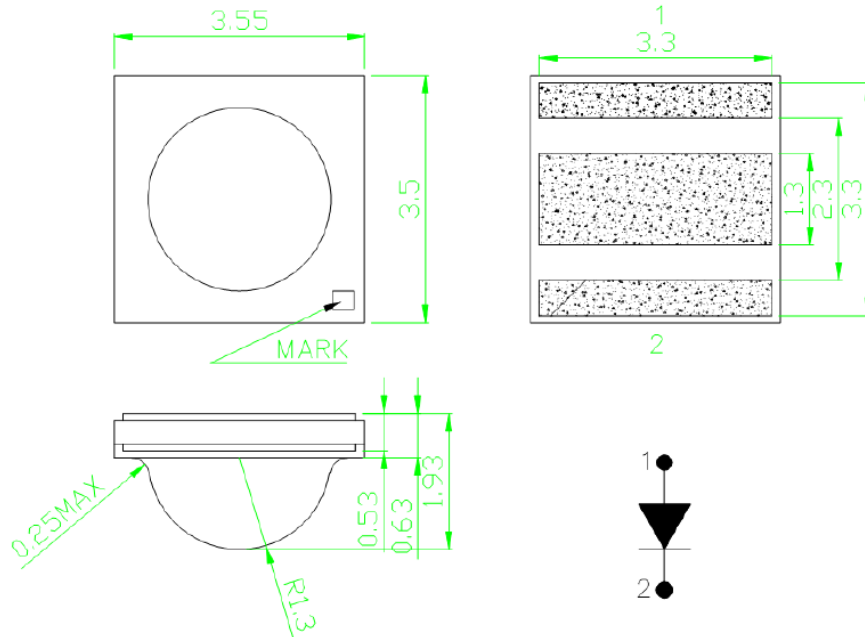
- 1. Low thermal resistance ceramic structure
- 2. Small size, flexible design
- 3. Automatic integration molding process
- 4. Light good uniformity, the perspective wide
- 5. High photosynthetic efficiency,

**Description**

- 1. General lighting
- 2. Stage light
- 3. Project-light lamp
- 4. The landscape lighting
- 5. Other lighting

highlights flux maintenance ratio

**Package Dimensions**



**Notes:**

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Øv (lm) @ 350mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
<b>IE-3535R-SB-L-CE</b>	RED	<b>WATER CLEAR</b>	40	50	120

Note:

1. 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

### Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	RED	620	630	nm	IF=350mA
λ <sub>D</sub>	Dominant Wavelength	RED			nm	IF=350mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	RED			nm	IF=350mA
C	Capacitance	RED			pF	VF=0V;f=1MHz
VF	Forward Voltage	RED	2.3	2.6	V	IF=350mA
IR	Reverse Current	RED		≤5	uA	VR = 5V

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

### Absolute Maximum Ratings at T<sub>A</sub>=25°C

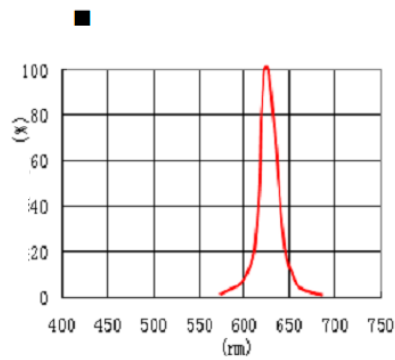
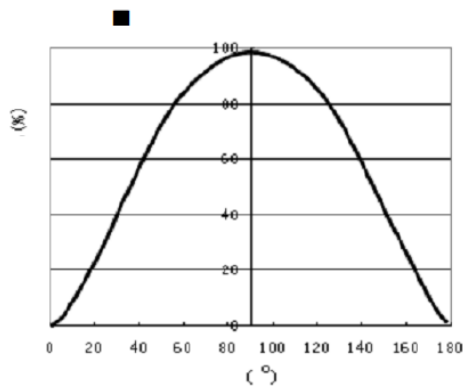
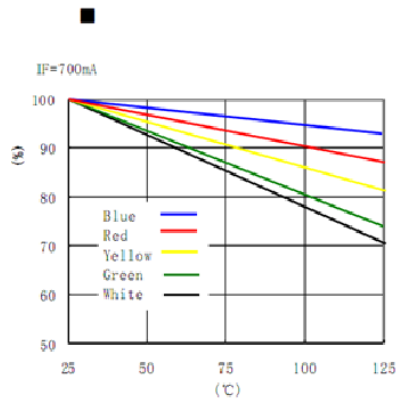
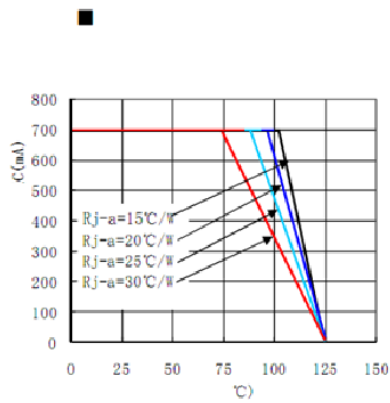
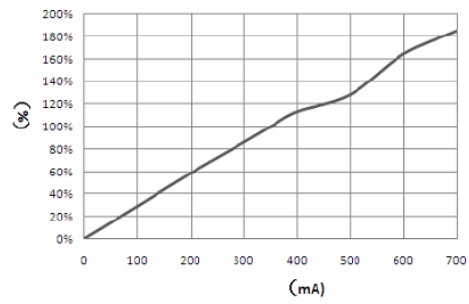
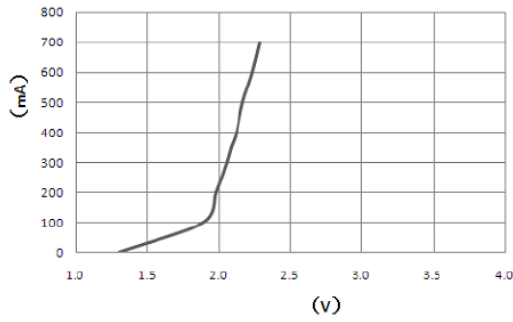
Parameter	RED	Units
Power dissipation	1	W
DC Forward Current	350	mA
Peak Forward Current [1]	500	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

■ Typical Electrical/ Optical Characteristics Curves  
( $T_a=25^\circ\text{C}$  Unless Otherwise Noted) :

**Forward Current Characteristics**



## Reliability experiments

	JESD22 A108-C	1008	
	JESD22 A108-C	85°C 1008	
	JESD22 A108-C	-40°C 1008	1. >200mV 2. InGaN LEDs >15% AlInGaP LEDs >25% 3. >10 μA
	JESD22 A101-B	60°C 1008	
	JESD22 A101-B	-20°C ~0°C ~25°C ~60°C ~25°C (30 ) (30 ) (30 ) (30 ) (30 ) 60% (RH) 20	
	MIL-STD-202G 107G	-40°C ~125°C <60 100	LED

### ■ Handling

Handle the component along the side surfaces by using forceps or appropriate tools. The forceps or other appropriate tools should not put any pressure on the lens. It's also strictly forbidden to poke and press the lens.

### ■ Electrical Notes

1. The LED can not be driven reversely.
2. It's necessary to have the measures to limit the current. Otherwise slight voltage shift may cause enormous current change and results in the failure of LEDs.
3. It is recommended that the drive current should be lower when the light output is enough for applying. It would be helpful to improve the product's reliability.

### ■ Antistatic

The LEDs are electrostatic sensitive devices, so antistatic steps should be taken during the processing.