

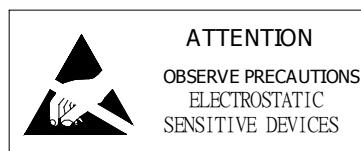


鑫谷光电股份有限公司  
GOLDEN VALLEY OPTOELECTRONICS CO., LTD.

## SPECIFICATION FOR LED LAMP

P/N : LG551CBN

Approved Sheet



Designed by	Qualified by	Approved by Customer

# LG551CBN

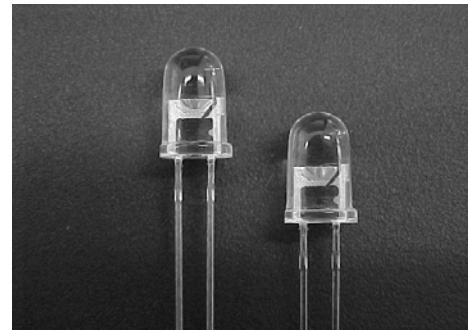
Spec. No. : GT-0210-09-141

## Features

- ◆ Standard T-1 3/4 package
- ◆ General purpose leads
- ◆ Viewing Angle :25°

## Benefits

- ◆ High intensity
- ◆ Lower Power Consumption
- ◆ High Reliability and Firm and Solid
- ◆ Optimal Optical and Mechanical Design



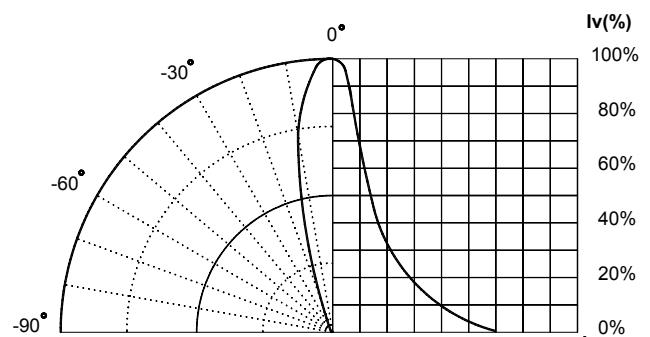
## Applications

- ◆ Electronic Signs and Signals
- ◆ Small Area Illumination
- ◆ Lighting
- ◆ General Purpose Indicators

## Description

- ◆ The T-1 3/4 lamps are untinged, nondiffused, and incorporates precise optics producing well defined spatial radiation patterns at specific viewing cone angles, this capability drastically reduce the number of LEDs required for lighting functions-there by lowering the total cost.

LED Picture

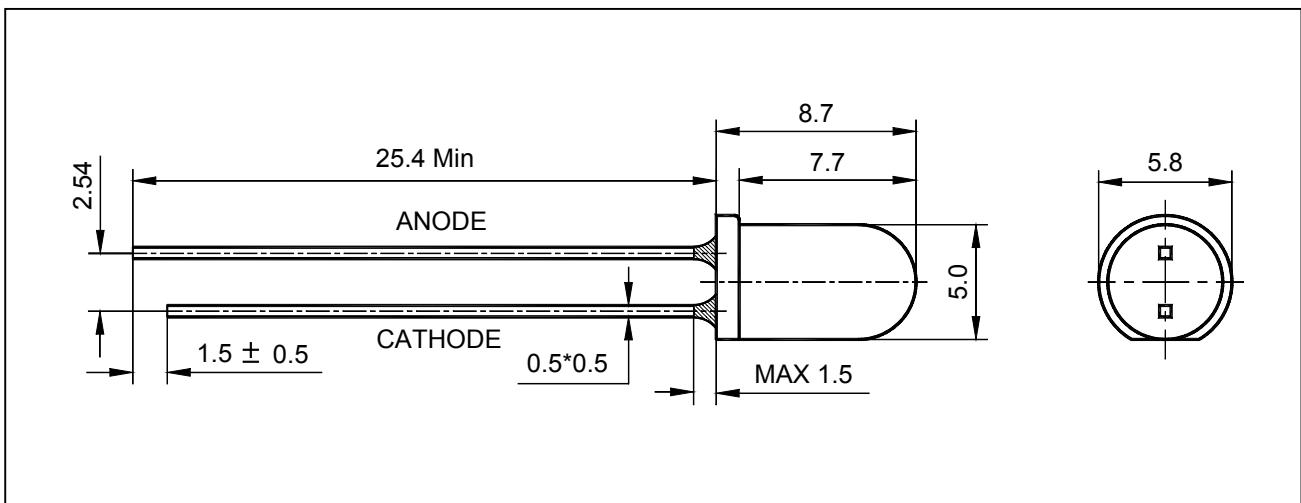


Beam Pattern

## Device Selection Guide

Part Number	Viewing Angle	Resin Color	LED Color	Chip Material	Stand OFF
LG551CBN	25°	Water Clear	Pure Green	InGaN/Al <sub>2</sub> O <sub>3</sub>	No

## Package Dimensions



**Notes:**

1. All dimensions are in millimeters
2. Tolerance is  $\pm 0.20$ mm unless otherwise noted.
3. Protruded resin under flange is 1.5mm max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

## Absolute Maximum Rating at $T_a=25^\circ\text{C}$

Parameter	Value	Units
Power Dissipation	95	mW
Peak Forward Current(1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Forward Current	25	mA
Reverse Voltage	5	V
Operating Temperature Range	-30°C to + 80°C	
Storage Temperature Range	-40°C to + 100°C	
Lead Soldering Temperature(3mm From Body)	260°C for 5 Seconds	

**Electrical Optical Characteristics at Ta=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Luminous Intensity	I <sub>v</sub>	2800	----	----	mcd	I <sub>f</sub> =20mA
Viewing Angle	2θ <sub>1/2</sub>	----	25	----	Deg.	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	----	525	----	nm	I <sub>f</sub> =20mA
Forward Voltage	V <sub>f</sub>	----	3.3	3.8	V	I <sub>f</sub> =20mA
Reverse Current	I <sub>r</sub>	----	----	50	μA	V <sub>r</sub> =10V

**Note:** 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.  
 2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity, 2θ<sub>1/2</sub> = θ<sub>1/2</sub> + θ<sub>1/2</sub>.

**Bin Rank Combination**

Rank	N	P	Q	R
Luminous Intensity (I <sub>f</sub> = 20mA)	2800~3600mcd	3600~4700mcd	4700~6100mcd	6100~8000mcd
Rank	S	T	---	---
Luminous Intensity (I <sub>f</sub> = 20mA)	8000~10000mcd	10000~13500mcd	----	----

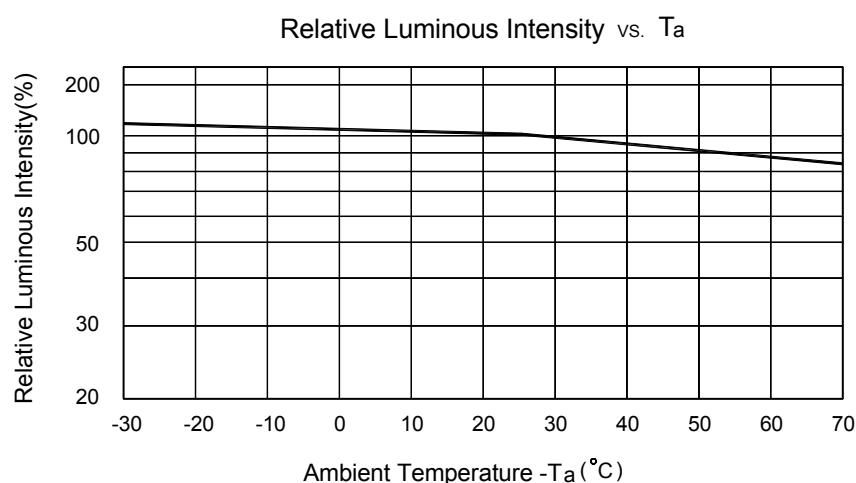
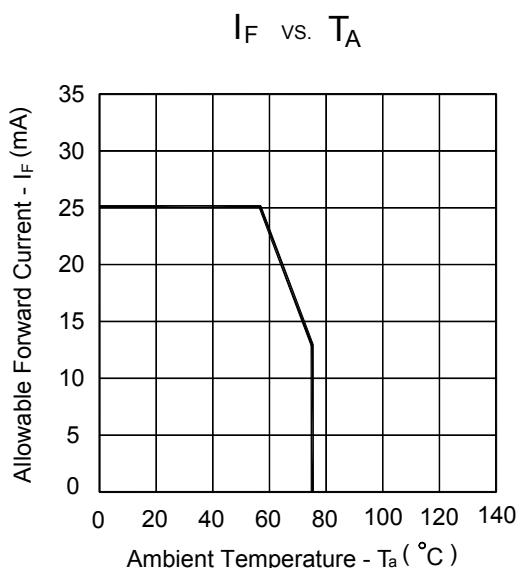
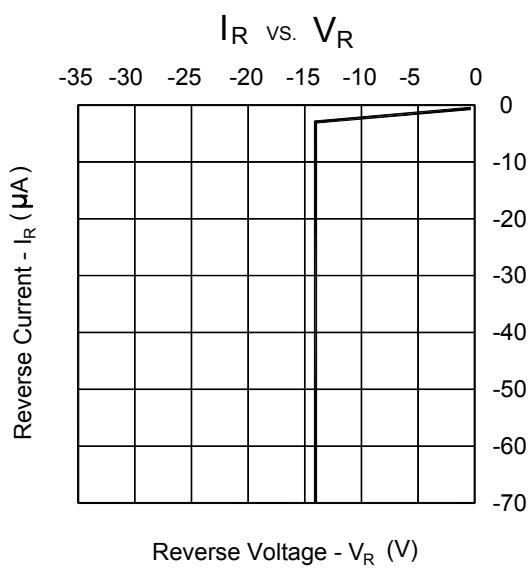
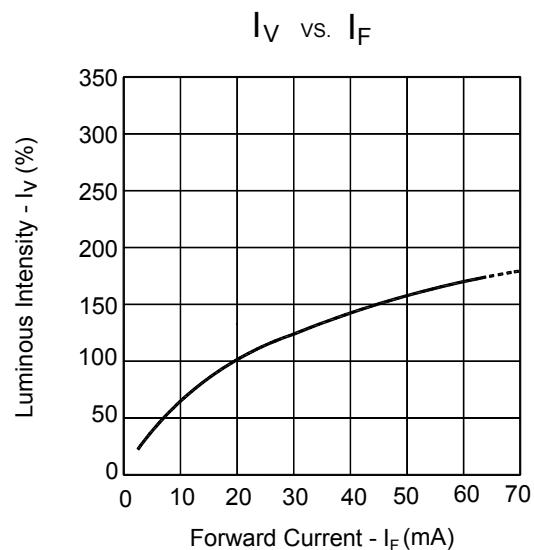
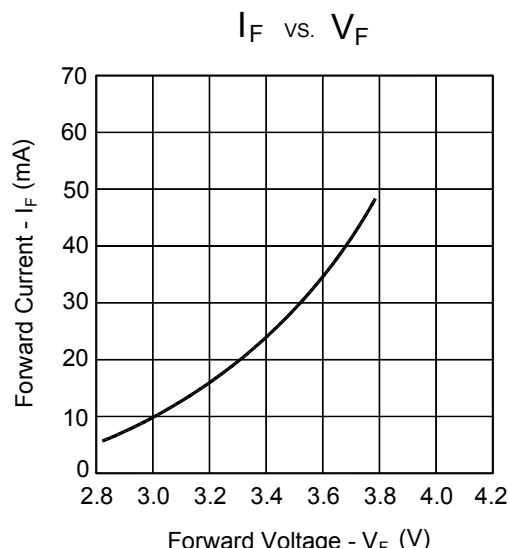
Rank	G6	G7	G8	---
Wavelength Specification (I <sub>f</sub> = 20mA)	520~525nm	525~530nm	530~535nm	----

**Note:** The quantity ratio of the ranks is decided by GVOPTO.  
 Measurement Uncertainty of the Luminous intensity : ±15%  
 Measurement Uncertainty of the Dominant Wavelength : ±1.0nm  
 Measurement Uncertainty of the Forward Voltage : ±0.1V

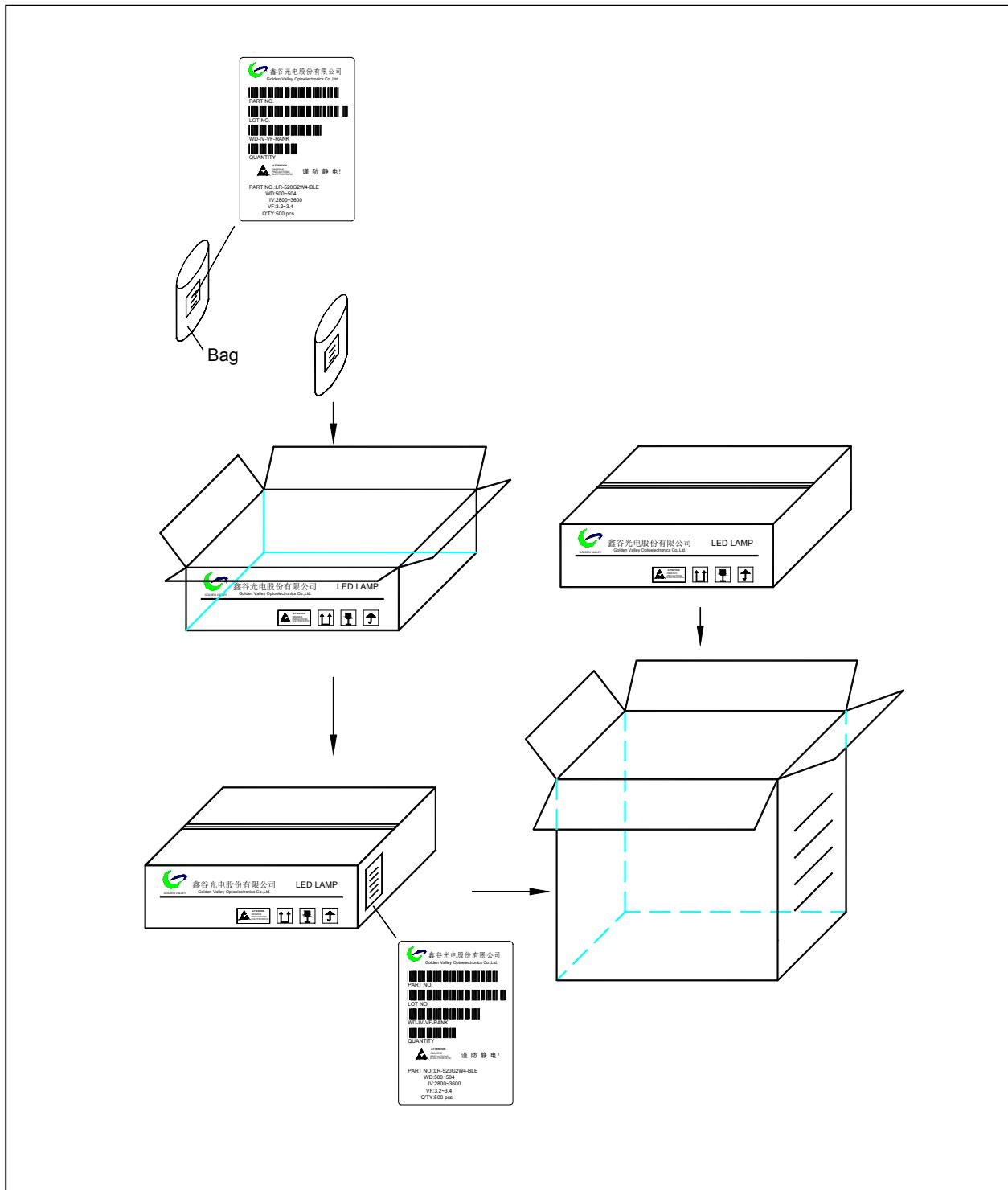
**Cautions on LED Usage**

1. Static electricity and surge will damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
2. Use grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
3. G.V. will not be held responsible for any damage caused by the operation exceeds the absolute maximum ratings.
4. Use the LEDs as soon as possible once the bag was opened. Store and use where there is no corrosive gas. The leads of LEDs will be rusty when the LEDs were exposed to the air for longer than one month.

**Typical Electrical / Optical Characteristics Curves**  
 (25°C Ambient Temperature Unless Otherwise Noted)



## Packing Specification



### Notes :

1. Inner ploy bag is common products
2. 30 bags per inner box, 15 kpcs per inner box .
3. 3 inner box per outer box, 45 kpcs per outer box