

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

SPECIFICATION FOR LED LAMP

P/N: LB552C4N

Approved Sheet



Designed by	Qualified by	Approved by Customer

Spec. No.: GT-0210-09-097

Features

- ◆ Standard T-1 3/4 package
- ◆ General purpose leads
- ♦ Viewing Angle :40°

Benefits

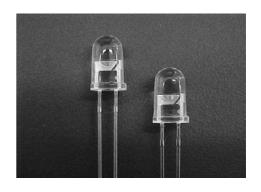
- ♦ High intensity
- Lower Power Consumption
- ♦ High Reliability and Firm and Solid
- ◆ Optimal Optical and Mechanical Design

Applications

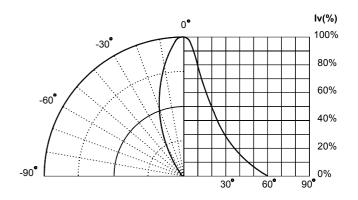
- ♦ Electronic Signs and Signals
- ◆ Small Area Illumination
- ◆ Lighting
- General Purpose Indicators

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

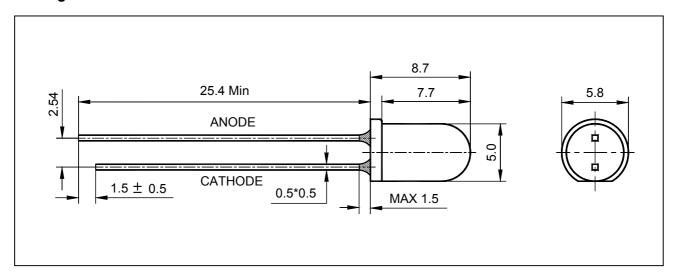


Beam Pattern

Device Selection Guide

Part Number	Viewing Angle	Resin Color	LED Color	Dice Material	Stand OFF
LB552C4N	40°	Water Clear	Blue	InGaN/Al ₂ O ₃	No
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Package Dimensions



Notes:

- 1. All dimensions are in millimeters
- 2. Tolerance is ± 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 Ta=25 $^{\circ}$ 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℃ for 5 Seconds		

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Тур.	Max.	Unit	Remark
Luminous Intensity	lv	260			mcd	I _f =20mA
Viewing Angle	201/2		40		Deg.	I _f =20mA
Dominant Wavelength	λ _d		470		nm	I _f =20mA
Forward Voltage	V _f		3.3	3.8	V	I _f =20mA
Reverse Current	l _r			50	μ Α	V _r =10V

Note: 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

Bin Rank Combination

Rank	D	E	F	G
Luminous Intensity (I _f = 20mA)	260~340mcd	340~450mcd	450~580mcd	580~750mcd
Rank	н	J		
Luminous Intensity (I _f = 20mA)	750~980mcd	980~1300mcd		

Rank	B2	В3	
Wavelength Specification (I _f = 20mA)	465~470nm	470~475nm	

Note: The quantity ratio of the ranks is decided by GVOPTO.

Measurement Uncertainty of the Luminous intensity : $\pm 15\%$ Measurement Uncertainty of the Dominant Wavelength : ± 1.0 nm
Measurement Uncertainty of the Forward Voltage : ± 0.1 V

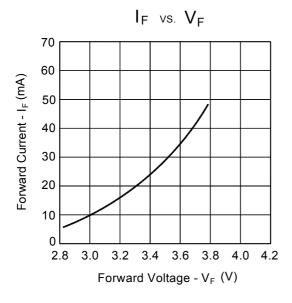
Cautions on LED Usage

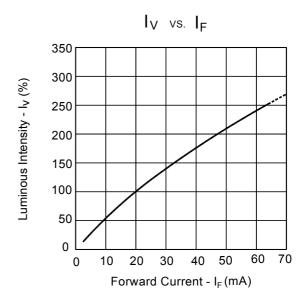
- Static electricity and surge will damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- 2. Use grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
- 3. G.V. will 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.

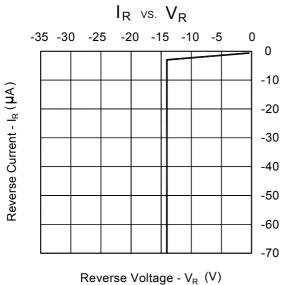
^{2.} $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity, $2\theta_{1/2} = \theta_{1/2} + \theta_{1/2}$

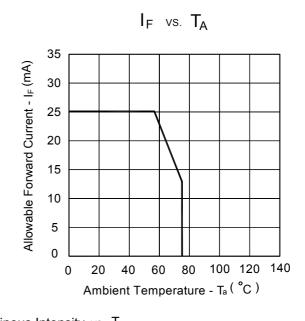
Typical Electrical / Optical Characteristics Curves

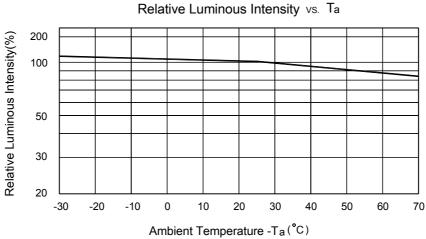
(25℃ Ambient Temperature Unless Otherwise Noted)



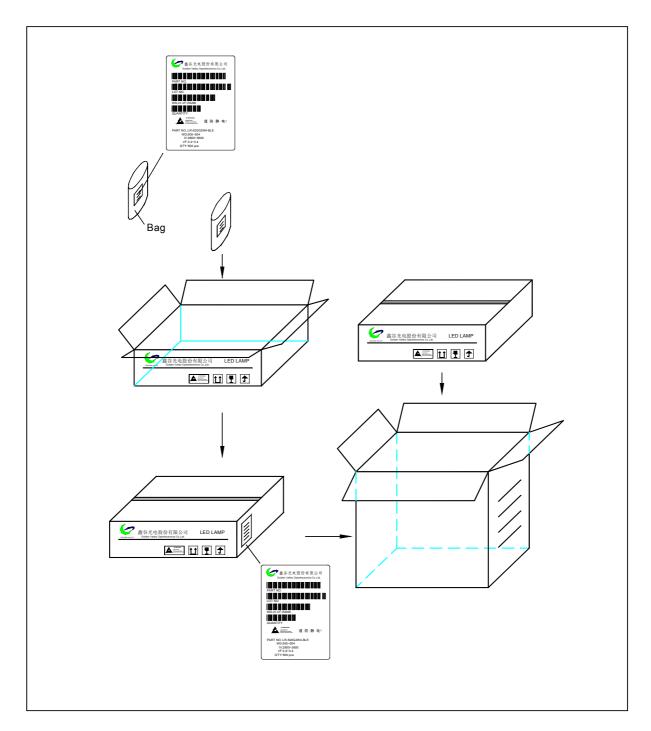








Packing Specification



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