

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

SPECIFICATION FOR LED LAMP

P/N: LY554CAL

Preliminary

Designed by	Qualified by	Approved by Customer

LY554CAL

Spec. No.: GT-0210-09-115

Features

- ◆ Standard T-1 3/4 package
- General purpose leads
- Viewing Angle : 15°



LED Picture

Benefits

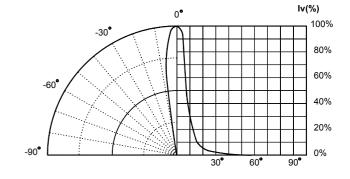
- ◆ Lower Power Consumption
- ◆ Optimal Optical and Mechanical Design

Applications

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

Description

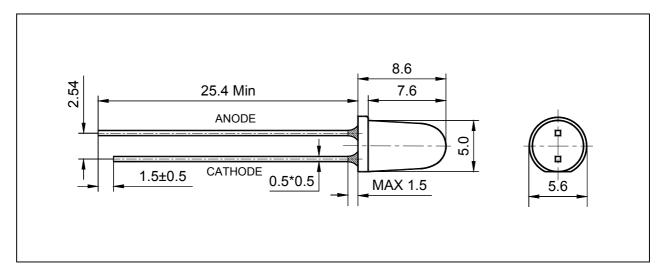
◆ The T-1 3/4 lamps are untinged, nondiffused .,



Device Selection Guide

Part Number	Viewing Angle	Resin Color	LED Color	Chip Material	Stand OFF
LY554CAL	15°	Water Clear	Yellow	AlGalnP/GaAs	No
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Package Dimensions



Notes:

- 1. All dimensions are in millimeters
- 2. Tolerance is ±0.20mm 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℃

Parameter	Value	Units	
Power Dissipation	75	mW	
Peak Forward Current(1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA	
Forward Current	30	mA	
Reverse Voltage	5	V	
Operating Temperature Range	-40°C to + 80°C		
Storage Temperature Range	-55℃ to + 100℃		
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	1300			mcd	I _f =20mA
Viewing Angle	201/2		15		Deg.	I _f =20mA
Dominant Wavelength	λ _d		590		nm	I _f =20mA
Forward Voltage	V_{f}		2.0	2.4	V	I _f =20mA
Reverse Current	I _r			100	μА	V _r =10V

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

Bin Ranks

Rank	К	L	M	N	Р
Luminous Intensity	1300~1700 mcd	1700~2200 mcd	2200~2800 mcd	2800~3600 mcd	3600~4700 mcd
$(I_f = 20mA)$					

Rank	Y3	Y4	Y5	Y6	Y7
Wavelength Specification (I _f = 20mA)	584~586nm	586~588nm	588~590nm	590~592nm	592~594nm

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

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

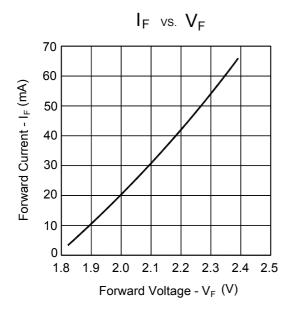
Cautions on LED Usage

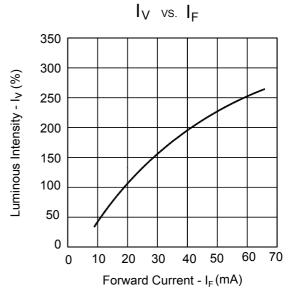
- Static electricity and surge will damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- 2. Use grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
- 3. G.V. will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

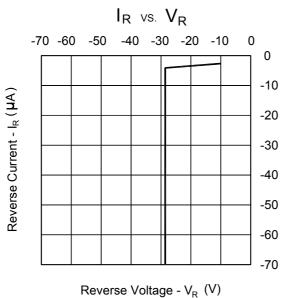
^{2.} $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity, $2\theta_{1/2} = \theta_{1/2} + \theta_{1/2}$

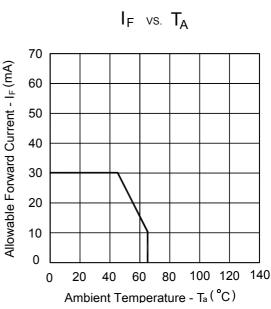
Typical Electrical / Optical Characteristics Curves

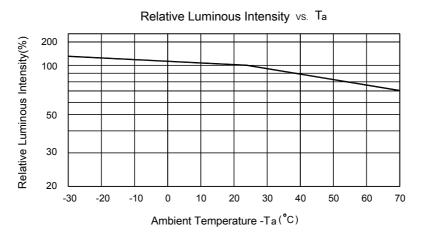
(25℃ Ambient Temperature Unless Otherwise Noted)



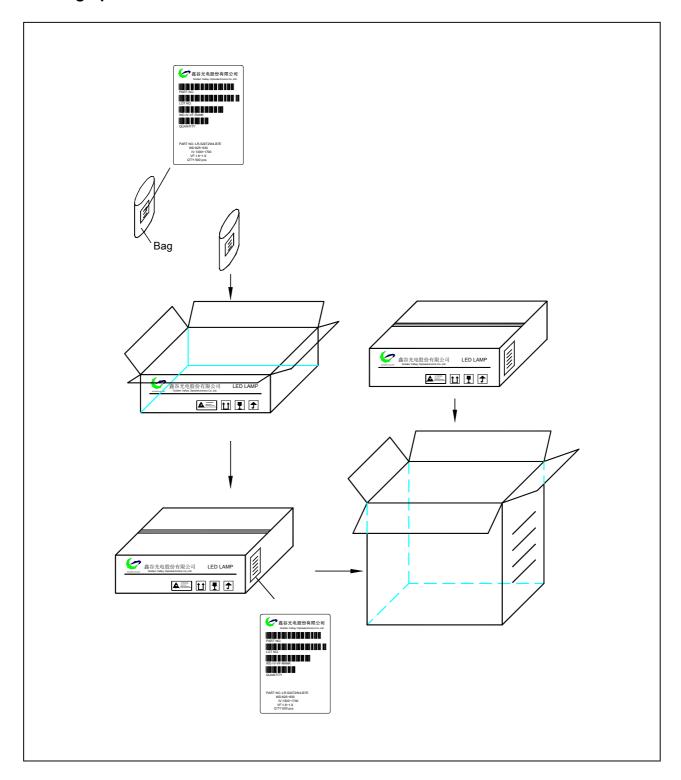








Packing Specification



Notes:

- 1. Inner ploy bag is common products
- 2. 20 bags per inner box, 20 kpcs per inner box .
- 3. 3 inner box per outer box, 60 kpcs per outer box