



## SPECIFICATION FOR LED LAMP

P/N : LY554CAN

Approved Sheet

| Designed by | Qualified by | Approved by Customer |
|-------------|--------------|----------------------|
|             |              |                      |

# LY554CAN

Spec. No. : GT-0210-09-091

## Features

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

## Benefits

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



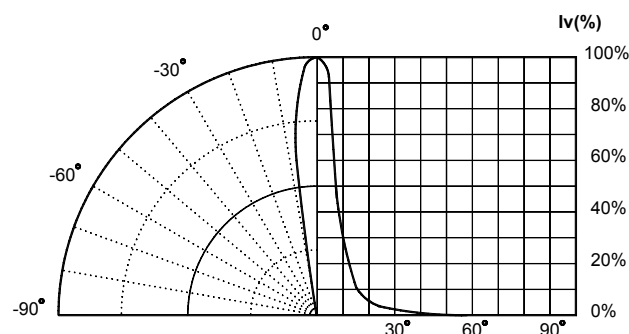
LED Picture

## Applications

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

## Description

- ◆ The T-1 3/4 lamps are untinged, nondiffused ., The precise optical design takes fine or special radiant pattern. This characteristic provides suitable viewing angle and helpful for special lighting function.

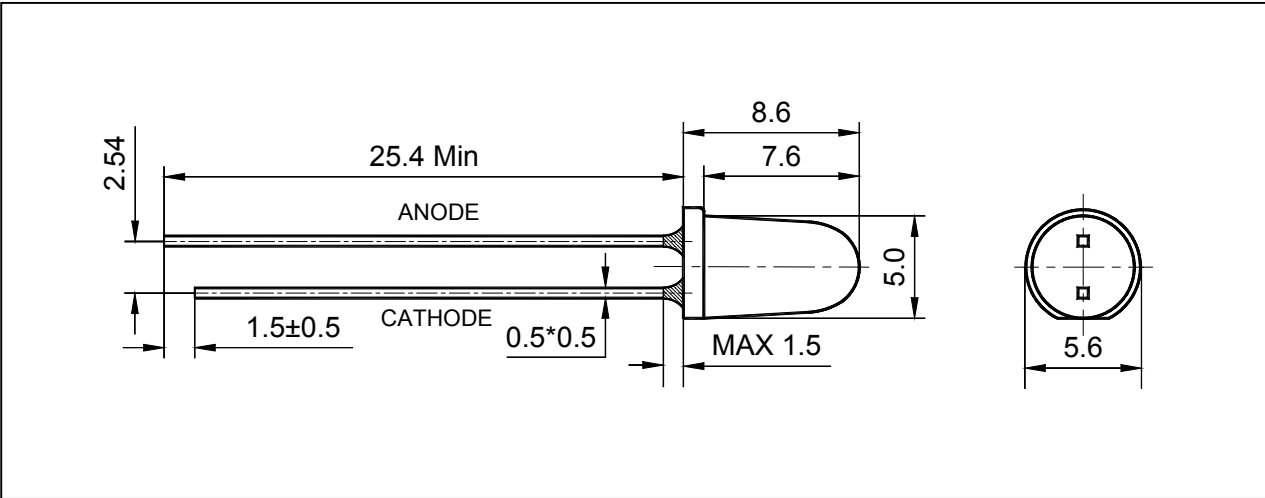


Beam Pattern

## Device Selection Guide

| Part Number | Viewing Angle | Resin Color | LED Color | Chip Material | Stand OFF |
|-------------|---------------|-------------|-----------|---------------|-----------|
| LY554CAN    | 15°           | Water Clear | Yellow    | AlGaInP/GaAs  | No        |
|             |               |             |           |               |           |
|             |               |             |           |               |           |
|             |               |             |           |               |           |

Package Dimensions



- Notes:**
- 1. All dimensions are in millimeters
  - 2. Tolerance is  $\pm 0.20\text{mm}$  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°C

| Parameter  | Value               | Units |
|--|---------------------|-------|
| Power Dissipation  | 150                 | mW    |
| Peak Forward Current(1/10 Duty Cycle, 0.1ms Pulse Width) | 100                 | mA    |
| Forward Current  | 50                  | mA    |
| Reverse Voltage  | 25                  | V     |
| Operating Temperature Range                              | -40°C to + 80°C     |       |
| Storage Temperature Range                                | -55°C to + 100°C    |       |
| Lead Soldering Temperature(3mm From Body)                | 260°C for 5 Seconds |       |

**Electrical Optical Characteristics at Ta=25℃**

| Parameter           | Symbol          | Min. | Typ. | Max. | Unit    | Remark     |
|---------------------|-----------------|------|------|------|---------|------------|
| Luminous Intensity  | $I_v$           | 1700 | ---- | ---- | mcd     | $I_f=20mA$ |
| Viewing Angle       | $2\theta_{1/2}$ | ---- | 15   | ---- | Deg.    | $I_f=20mA$ |
| Dominant Wavelength | $\lambda_d$     | ---- | 590  | ---- | nm      | $I_f=20mA$ |
| Forward Voltage     | $V_f$           | ---- | 2.0  | 2.4  | V       | $I_f=20mA$ |
| Reverse Current     | $I_r$           | ---- | ---- | 100  | $\mu A$ | $V_r=10V$  |

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

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

**Bin Ranks**

| Rank                                   | L             | M             | N             |
|--|---------------|---------------|---------------|
| Luminous Intensity<br>( $I_f = 20mA$ ) | 1700~2200 mcd | 2200~2800 mcd | 2800~3600 mcd |
| Rank                                   | P             | Q             | R             |
| Luminous Intensity<br>( $I_f = 20mA$ ) | 3600~4700 mcd | 4700~6100 mcd | 6100~8000 mcd |

| Rank   | Y3        | Y4        | Y5        | Y6        | Y7        |
|--|-----------|-----------|-----------|-----------|-----------|
| Wavelength Specification<br>( $I_f = 20mA$ ) | 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 :  $\pm 15\%$

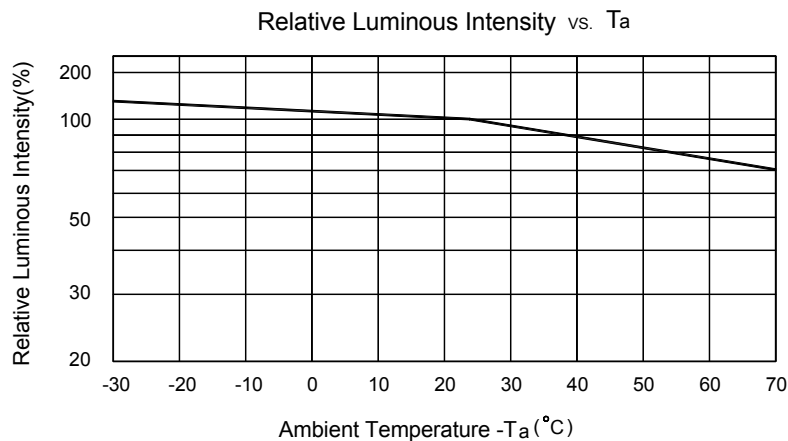
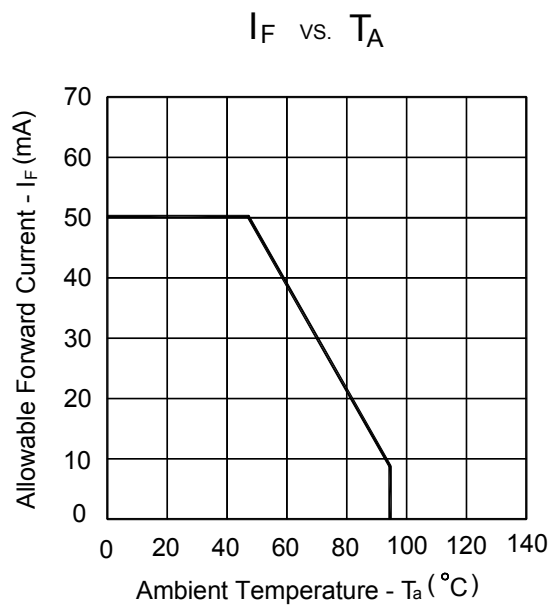
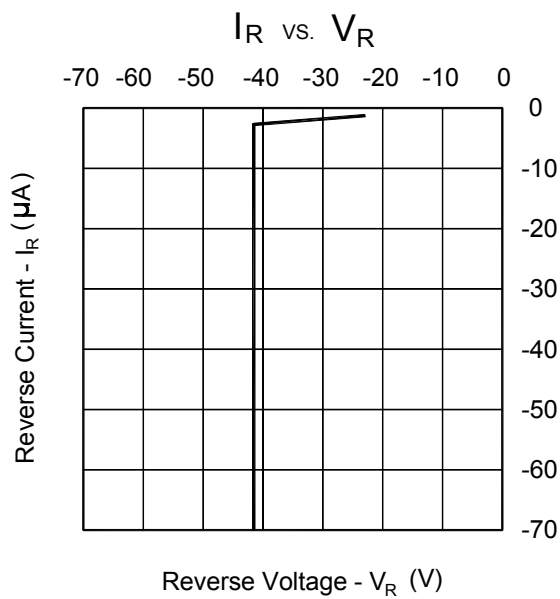
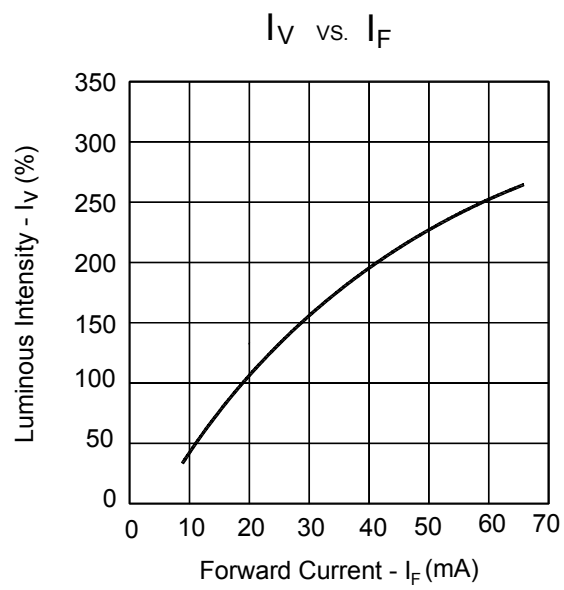
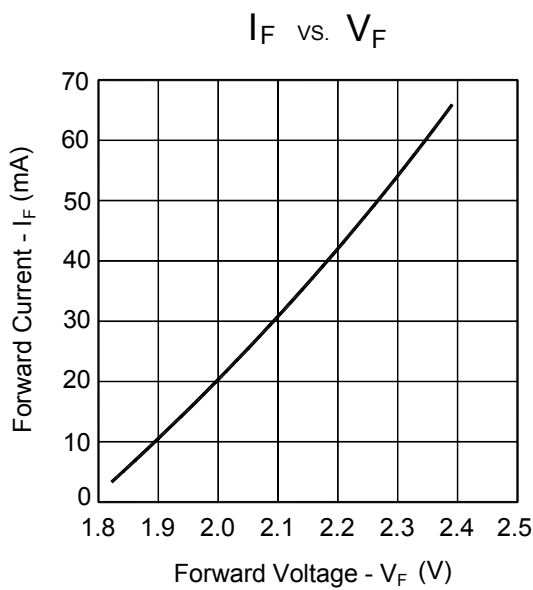
Measurement Uncertainty of the Forward Voltage :  $\pm 0.1V$

Measurement Uncertainty of the Dominant Wavelength :  $\pm 1.0nm$

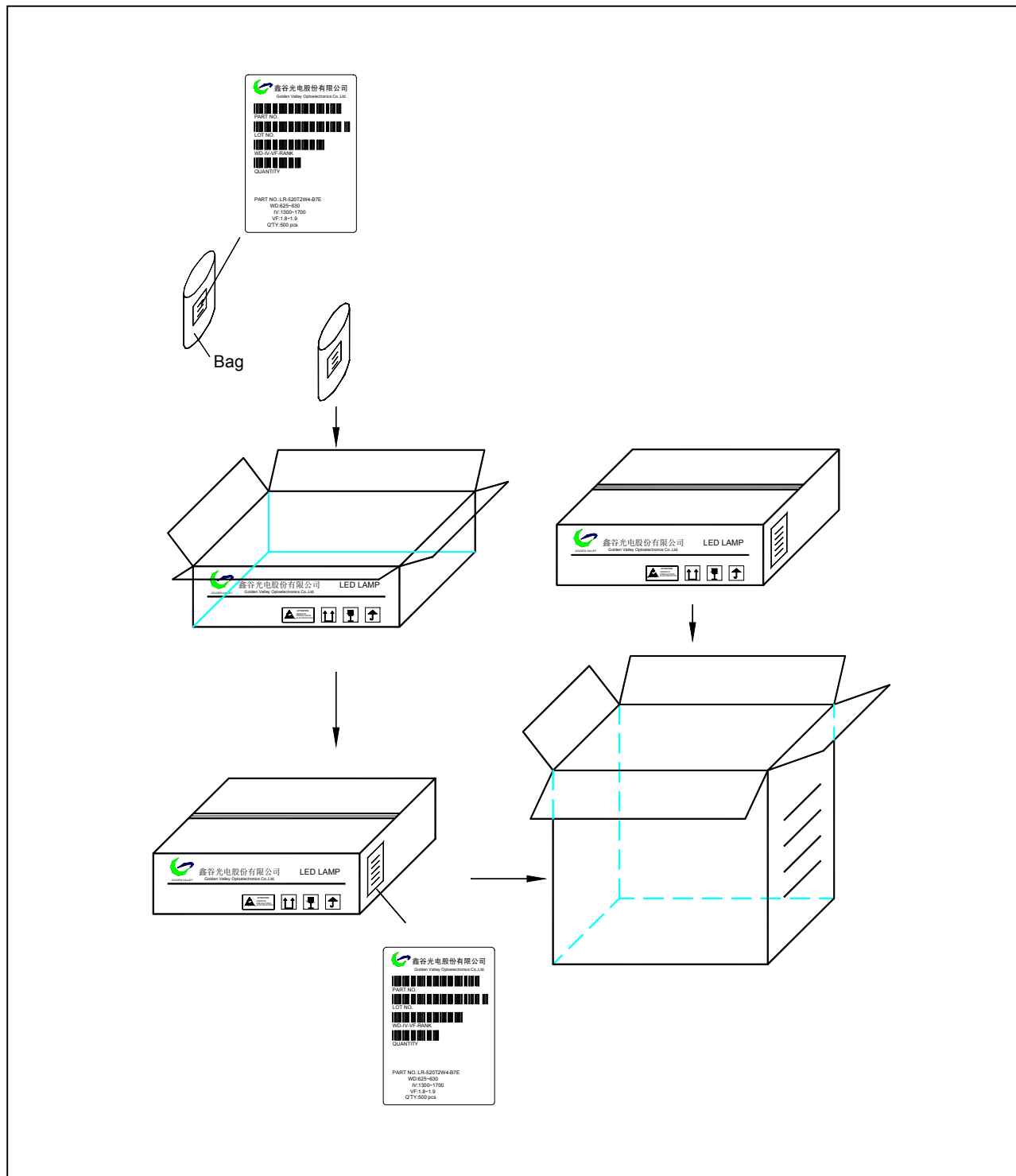
**Cautions on LED Usage**

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 play 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