

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

## **SPECIFICATION FOR LED LAMP**

P/N: LN346DMC

**Approved Sheet** 



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

#### Spec. No.: GT-0210-09-179

#### **Features**

- ◆ 4mm Parallel Oval
- Standard Lead Pitch
- Viewing Angle :110°/50°

### **Benefits**

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

## **Applications**

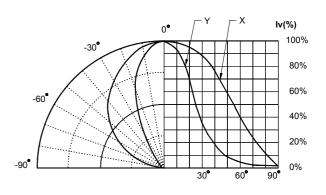
- ♦ For outer screen
- ♦ Electronic Signs and Signals
- Lighting
- ◆ General Purpose Indicators

## **Description**

◆ The 4mm parallel oval lamps are tinged, diffused ., The precise optical design takes fine or special radiant pattern. This characteristic provides suitable viewing angle and helpful for special lighting function.



**LED Picture** 

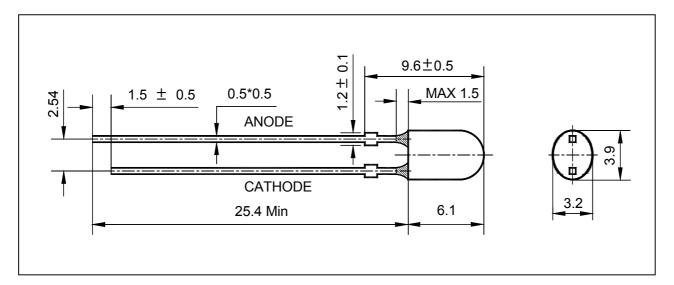


Beam Pattern

## **Device Selection Guide**

| Part Number | Viewing Angle | Resin Color    | LED Color  | Material                                | Stand OFF |
|-------------|---------------|----------------|------------|---|-----------|
| LN346DMC    | 110°/50°      | Color Diffused | Pure Green | InGaN/SiC                               | Yes       |
|             |               |                |            |   |           |
|             |               | 200            |            | *************************************** |           |
|             |               |                |            |   |           |

## **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 Ta=25℃

| Parameter  | Value              | Units |  |
|--|--------------------|-------|--|
| Power Dissipation  | 100                | 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℃ 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             | 340  |        |      | mcd        | I <sub>f</sub> =20mA |
| Viewing Angle       | 201/2          |      | 110/50 |      | Deg.       | I <sub>f</sub> =20mA |
| Dominant Wavelength | λ <sub>d</sub> |      | 520    |      | nm         | I <sub>f</sub> =20mA |
| Forward Voltage     | V <sub>f</sub> |      | 3.5    | 4.0  | V          | I <sub>f</sub> =20mA |
| Reverse Current     | l <sub>r</sub> |      |        | 50   | μ <b>А</b> | 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.

## **Bin Rank Combination**

| Rank               | E             | F           | G           | Н           | J            |
|--------------------|---------------|-------------|-------------|-------------|--------------|
| Luminous Intensity | 340~450 mcd   | 450~580 mcd | 580~750 mcd | 750~980 mcd | 980~1300 mcd |
| $(I_f = 20mA)$     | 010 100 11100 |             |             |             |              |

| Rank                     | GM           | G6              |  |
|--------------------------|--------------|-----------------|--|
| Wavelength Specification | 515~520 nm   | 520~525 nm      |  |
| $(I_f = 20mA)$           | 313*32011111 | 320 · 323 IIIII |  |

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 :  $\pm 1.0$ nm
Measurement Uncertainty of the Forward Voltage :  $\pm 0.1$ V

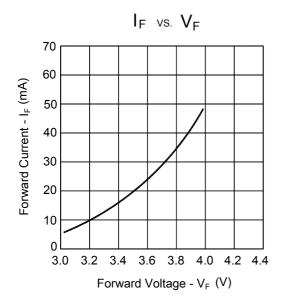
## **Cautions on LED Usage**

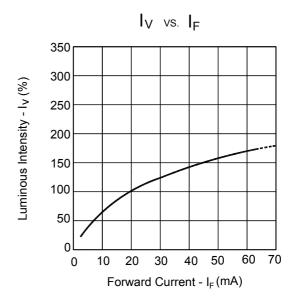
- Static electricity and surge will damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- 2. Use grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
- 3. G.V. will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

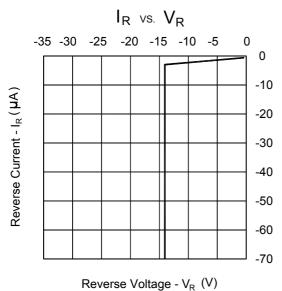
<sup>2.</sup>  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity,  $2\theta_{1/2} = \theta_{1/2} + \theta_{1/2}$ 

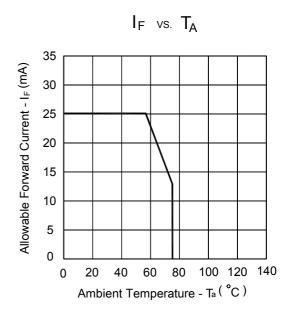
### **Typical Electrical / Optical Characteristics Curves**

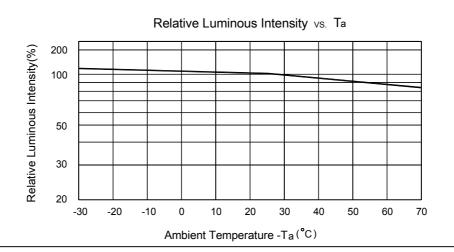
(25°C Ambient Temperature Unless Otherwise Noted)



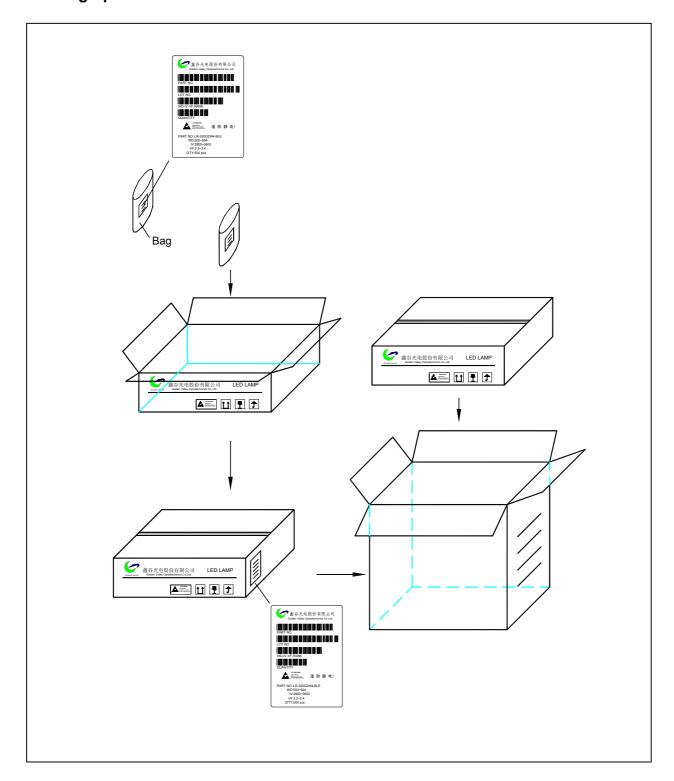








## **Packing Specification**



#### 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