

M8×0.75 安装开孔直径

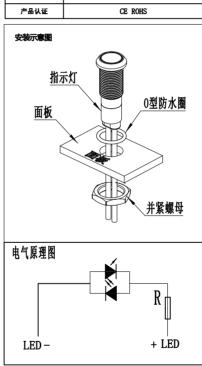
.XXX ±

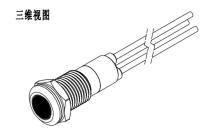
ANG ±

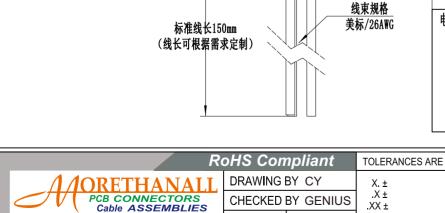
PPOJECTION -

SCALE 1:1









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UNIT / mm

DATE

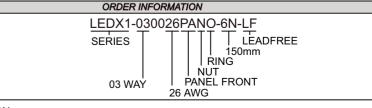
SIZE A4

螺纹长度

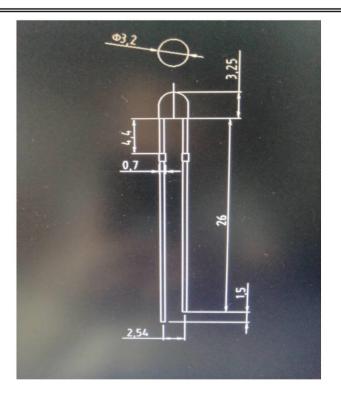
23.6

总长

照片框



DESCRIPTION: 8mm 指示灯



# Notes:

- 1. All diensione are in millimeters, and tolerance is 0.25mm except being specified.
- 2. Lead spacing is measurde where the lead emerges from the package.
- 3. Protruded resin under flange is 1.5mm Max.LED.

| Material | Emitting Color | Lens Color |
|----------|----------------|------------|
| InGaN    | Red            | White      |

# **Typical Electrical/Optical characteristics Curves:**

# ■ Absolute Maximum Rating(Ta=25°C)

| Prarmeter   | Symbol | Rating    | Unit                   |
|---|--------|-----------|------------------------|
| Continuous Forward Current                          | IF     | 30        | mA                     |
| Peak Forward Current*                               | IFP    | 150       | mA                     |
| Reverse Voltage                                     | Vr     | 5         | V                      |
| Reverse Current                                     | Ir     | 10        | μΑ                     |
| Power Dissipation                                   | PD     | 110       | mW                     |
| Electrostatic Discharge                             | Esd    | 3000      | V                      |
| Operating Temperature Range                         | Topr   | -25~+80   | $^{\circ}\!\mathrm{C}$ |
| Storage Temperature Range                           | Tstg   | -25~+80   | $^{\circ}\!\mathrm{C}$ |
| Lead Soldering Temperature* TSOL Max.260°C for 5sec |        | 5sec Max. |                        |

<sup>\*</sup>IFP Conditions:Pulse Width≤10msec

# ■ Elect rical and optical characteristics(Ta=25°C)

| parameter           | Symbol | Condition          | Min. | Тур. | Max. | Unit |
|---------------------|--------|--------------------|------|------|------|------|
| Luminous Intensity  | Iv     | IF=150mA           | 300  | 400  | 500  | Mcd  |
| Forward Voltage     | VF     | IF=150mA           | 1.8  | 2.0  | 2.3  | V    |
| Dominant wavelength | λD     | IF=150mA           | 620  | 625  | 630  | nm   |
| Viewing Angle       | 201/2  | IF=150mA           |      | 45   |      | Deg. |
| Lumen Value         | Φ      | IF=150mA           |      |      |      | Lм   |
| Color Tenperature   | ССТ    | IF=150mA           |      |      |      | K    |
| Reverse Current     | Ir     | V <sub>R</sub> =5V |      |      | 10   | Ua   |

**Note:** 1.Luminous intensity is measured with a light sensor and filter combination that approximates CIE (Commission International Dd L Eclairage)eye-response curve.

- 2.  $\theta$ 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda d$  is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. The Iv guarantee should be added  $\pm 15\%$ .

<sup>\*</sup>Tsol Conditions:3mm from the base of the epoxy bulb

#### **CAUTIONS**

### 1.Application

The LEDs described here are intended to be used for ordinary electronic equipment (such as office equipment, communication equipment and household applications). Consult UNI,s Sales in advance for information on applications in which exceptional reliability is required, particularly when the failure or malfunction of the LEDs may directly jeopardize life or health(such as in aviation ,transportation, traffic control equipment, medical and life support systems and safety devices)

#### 2.Storage

The storage ambient for the LEDs should not exceed 30° tenperature or 70% relative humidity.

It is recommended that LEDs out of their original packaging are used within three months.

For extended storage out of their original packaging, it is recommended that the LEDs be stored in a sealed container with appropriate desiccant or in desiccators with nitrogen ambient.

#### 3. Cleaning

Use alcohol-based cleaning solvent such as isopropyl alcohol to clean the LEDs if necessary.

#### 4.Lead Forming & Assembly

During lead froming, the leads shold be bent at point at least 3mm from the base of LED lens.

Do not use the base of the lead frame as a fulcrum during forming.

Lead forming must be done before soldering, at normal temperature.

During assembly on PCB, use minimum clinch force possible to avoid excessive mechanical stress.

### 5.Soldering

When soldering leave a minimum of 2mm clearance from the base of the lens to the soldering point. Dipping the lens into the solder must be avoided.

Do not apply any external stress to the lead frame during soldering while the LED is at high temperature.

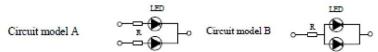
Recommended soldering conditions:

| 8                             |                              |                |           |  |
|-------------------------------|------------------------------|----------------|-----------|--|
| Soldering iron                |                              | Wave soldering |           |  |
|                               | 260°CMax                     | Pre-heat       | 100°C Max |  |
| Temperature<br>Soldering time | 3 sec.Max<br>(one time only) | Pre-heat time  | 60sec.Max |  |
|                               |                              | Solder wave    | 260°C Max |  |
|                               |                              | Soldering time | 5 sec.Max |  |

Note: Excessive soldering temperature and/or time might result in deformation of the LED lens or catastrophic failure of the LED.

### 6.Drive Method

An LED is a current-operated device, In order to ensure intenity uniformity on multiple LEDs connected in parallel in an application, it is recommended that a current limiting resistor be incorporated in the drive circuit, in series with each LED as shown in Circuit A below.



- (A)Recommended circuit
- (B) The brightness of each LED might appear different due to the differences in the I-V characteristics of those LEDs.

### 7.Protece Of ESD

Since the device is static sensitive, it is recomended that anti-static measures should be taken on human body, all