

# PRODUCT SPECIFICATION

**Model No.: FYL-48D2UBC1A**

| Descriptions:  |
|--|
| <ul style="list-style-type: none"> <li>■ Dice material: InGaN.</li> <li>■ Emitting Color: Super Bright Blue.</li> <li>■ Device Outline: Φ4.8mm round type.</li> <li>■ Lens Type: Water clear.</li> </ul> |



| CUSTOMER APPROVED SIGNATURES | APPROVED BY | CHECKED BY | PREPARED BY |
|------------------------------|-------------|------------|-------------|
|                              |             |            |             |

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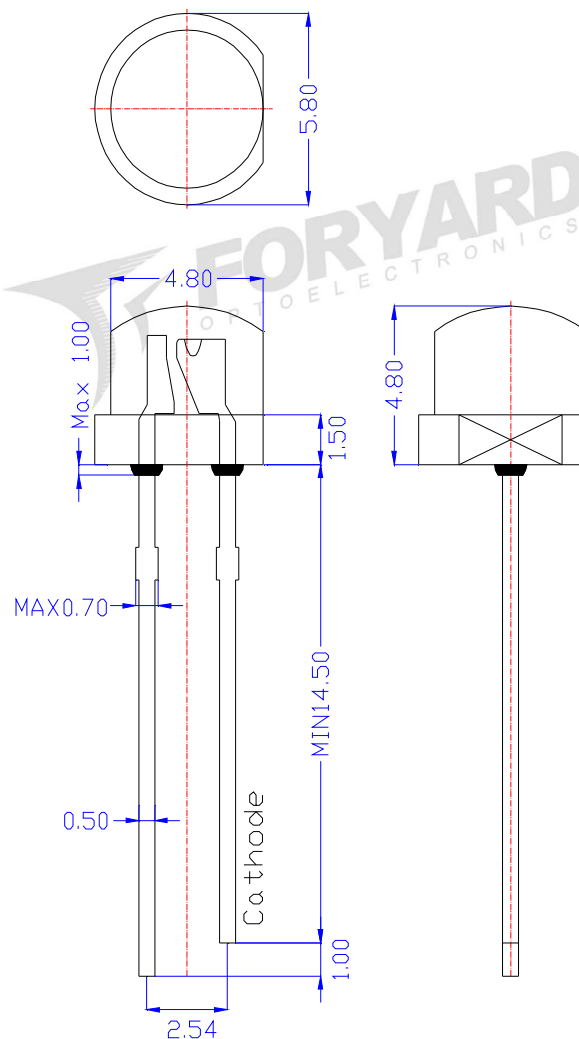
**E-mail:**Sales@foryard.com (General)

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### ■ Features

- 1.Low power consumption.
- 2.High efficiency.
- 3.General purpose leads.
- 4.High intensity.
- 5.RoHs compliant.

### ■ Package configuration



#### Notes:

1. All dimensions are millimeters (inches)
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The drawing is different from the actual one, please refer to the sample.

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### ■ Absolute Maximum Ratings(Ta=25°C)

| Parameter   | MAX.                | Unit  |
|---|---------------------|-------|
| Power Dissipation   | 100                 | mW    |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100                 | mA    |
| Continuous Forward Current                                | 30                  | mA    |
| Derating Linear From 50°C                                 | 0.4                 | mA/°C |
| Reverse Voltage   | 5                   | V     |
| Operating Temperature Range                               | -40°C to +85°C      |       |
| Storage Temperature Range                                 | -40°C to +100°C     |       |
| Lead Soldering Temperature[4mm(.157") From Body]          | 260°C for 5 Seconds |       |

### ■ Typical Electrical & Optical Characteristics(Ta=25°C)

| Parameter                | Symbol          | Min. | Typ. | Max. | Unit    | Test Condition |
|--------------------------|-----------------|------|------|------|---------|----------------|
| Luminous Intensity       | $I_V$           | 230  | 500  | 1000 | mcd     | IF=20mA        |
| Viewing Angle            | $2\theta_{1/2}$ | ---  | 100  | ---  | Deg     |                |
| Peak Emission Wavelength | $\lambda_p$     | ---  | 470  | --   | nm      |                |
| Dominant Wavelength      | $\lambda_d$     | 461  | 467  | 473  | nm      |                |
| Spectral Line Half-Width | $\Delta\lambda$ | ---  | 30   | --   | nm      |                |
| Forward Voltage          | $V_F$           | 2.6  | 3    | 3.4  | V       | VR=5V          |
| Reverse Current          | $I_R$           | ---  | ---  | 10   | $\mu A$ |                |

Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

#### ■ Luminous Intensity Guide (Unit: mcd) @IF=20mA

| Code                    | N12     | N13     | N14     | N15      |
|-------------------------|---------|---------|---------|----------|
| Luminous Intensity(mcd) | 230~350 | 350~500 | 500~700 | 700~1000 |

Tolerance of measurement of luminous intensity is  $\pm 15\%$

#### ■ Dominate Wavelength Guide (Unit: nm) @IF=20mA

| Code                    | B3      | B4      | B5      | B6      |
|-------------------------|---------|---------|---------|---------|
| Dominate Wavelength(nm) | 461~464 | 464~467 | 467~470 | 470~473 |

Tolerance for each Dominate Wavelength bin is  $\pm 1\text{nm}$

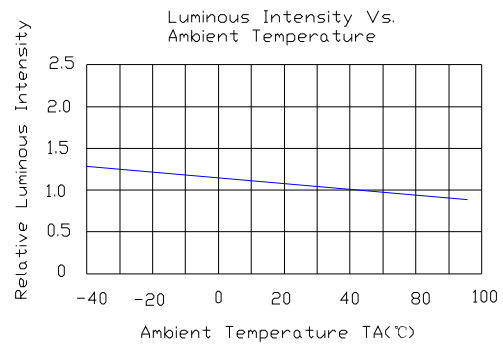
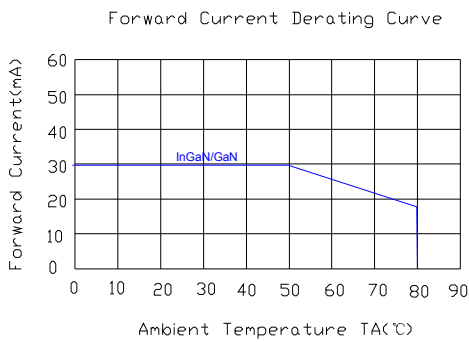
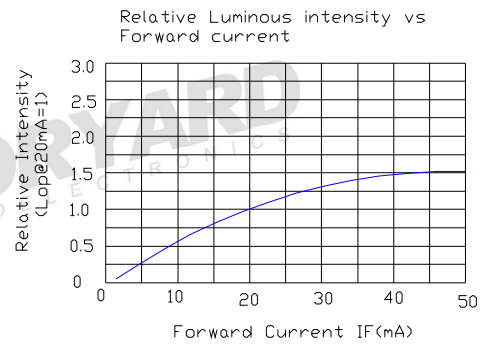
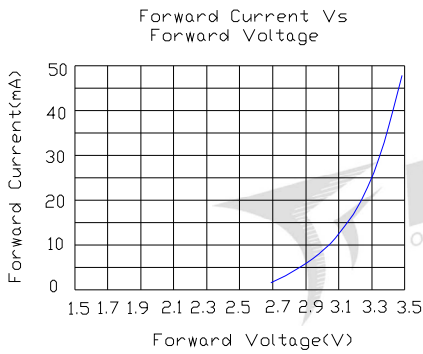
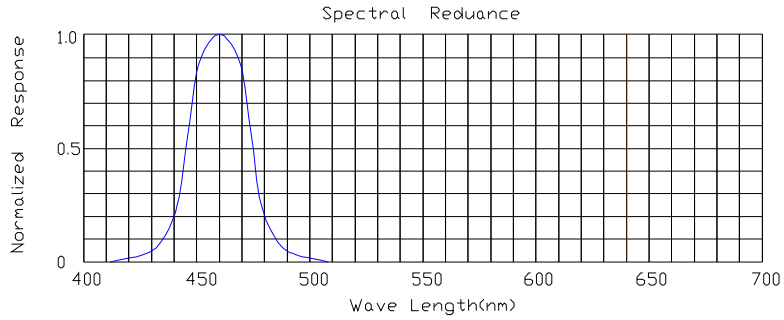
#### ■ Forward Voltage Guide (Unit: V) @IF=20mA

| Code               | V6      | V7      | V8      | V9      |
|--------------------|---------|---------|---------|---------|
| Forward Voltage(V) | 2.6~2.8 | 2.8~3.0 | 3.0~3.2 | 3.2~3.4 |

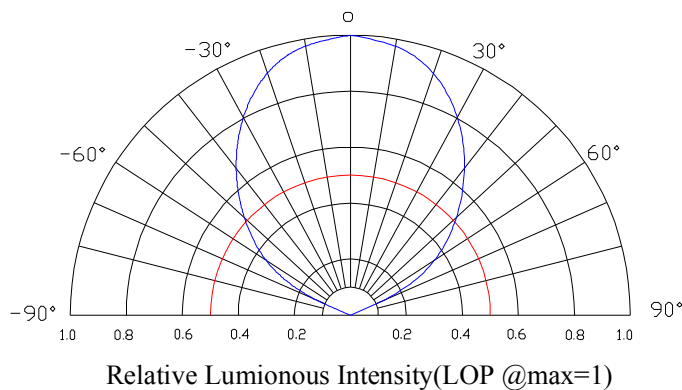
Tolerance of measurement of forward voltage is  $\pm 0.1\text{V}$

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**Typical Electrical/Optical Characteristics Curves(Ta=25°C Unless Otherwise Noted)**

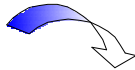
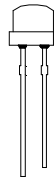


**Radiation pattern**

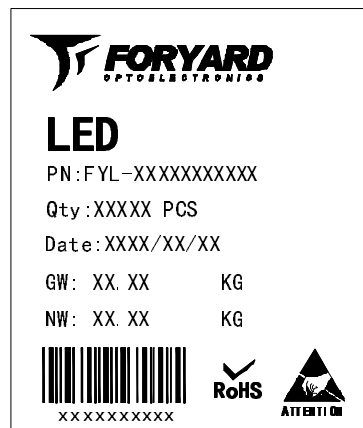
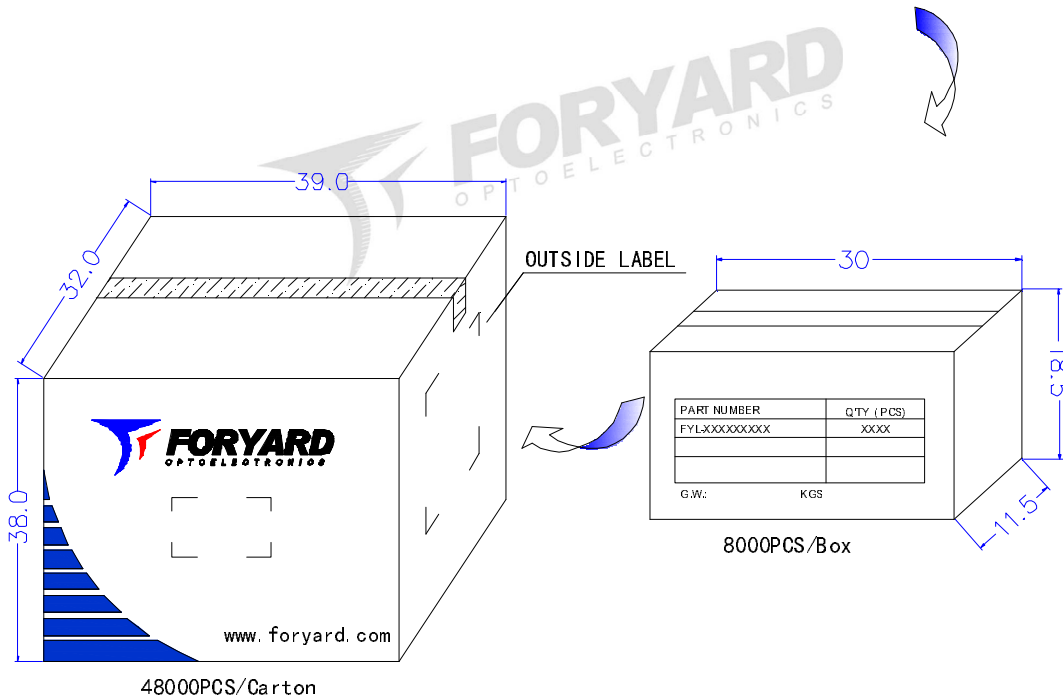


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**■ LAMP PACKING.**



4. 8mm 1000PCS/Polybag



OUTSIDE LABEL

Note: The specifications are subject to change without notice. Please contact us for updated information.