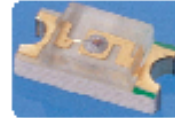


# PRODUCT SPECIFICATION

**Model No.: FYLS-1206UBC**

## Features:

- SMD Type
- Size (mm):3.2\*1.6\*1.1
- Emitting Color:Blue
- SMT package
- Suitable for all SMT assembly and soldering method
- Pb-free Reflow soldering application
- RoHS Compliant



## Applications:

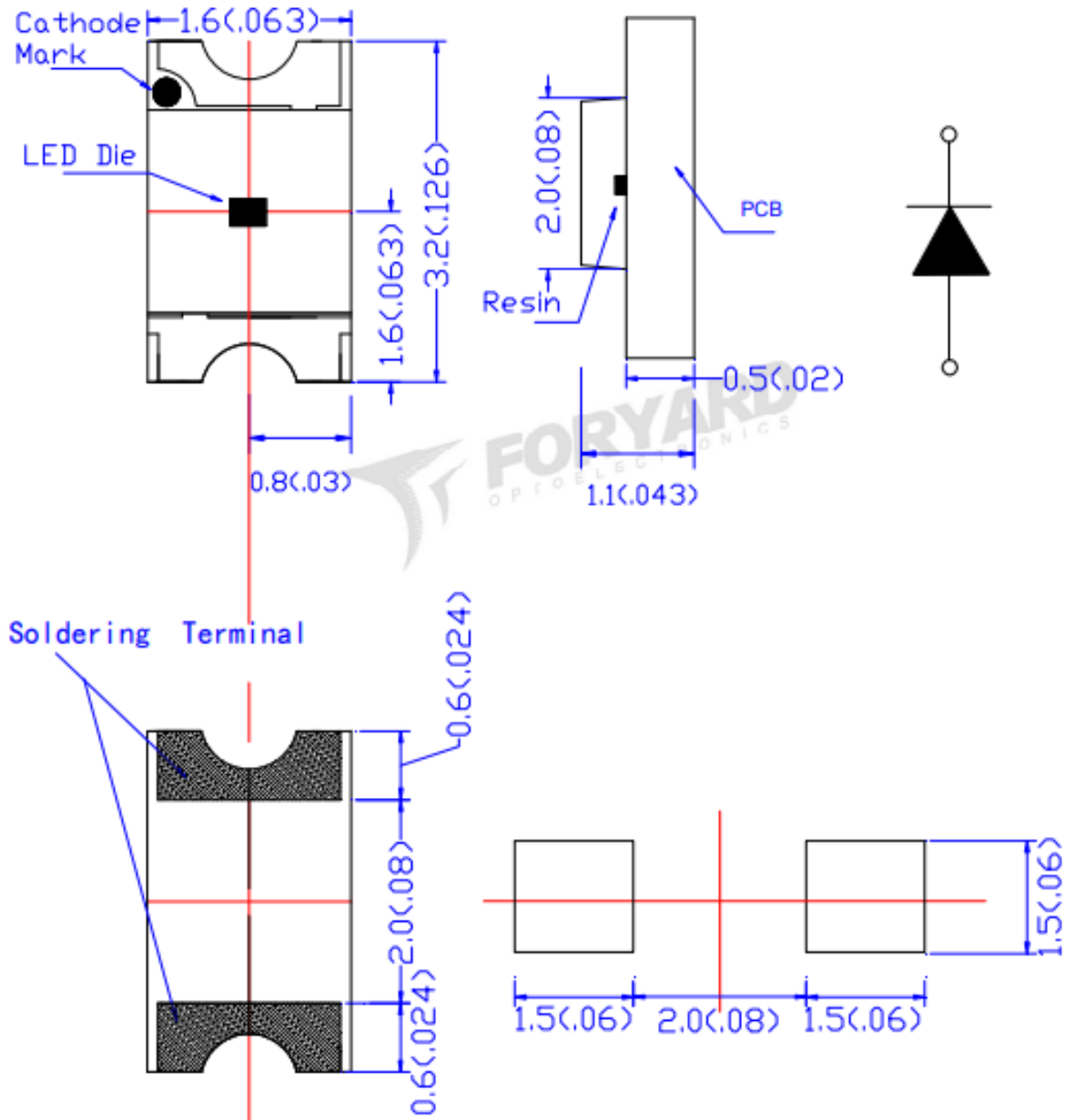
- Light Strips
- LCD Backlight
- Decorative lighting
- Indicators
- Interior automotive
- Illuminations
- Mobile Phones



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

Model No.: FYLS-1206UBC

■ Mechanical Dimensions



Notes:

1. Dimension in millimeter [inch], tolerance is  $\pm 0.25$  [ $\pm 0.010$ ].
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Model No.: FYLS-1206UBC

■ Absolute Maximum Ratings(Ta=25° C)

| Items                 | Symbol | Absolute maximum Rating     | Unit |
|-----------------------|--------|-----------------------------|------|
| Forward Current(DC)   | IF     | 30                          | mA   |
| Peak Forward Current* | IFP    | 100                         | mA   |
| Power Dissipation     | PD     | 100                         | Mw   |
| Operation Temperature | Topr   | -40° C~+85° C               | °C   |
| Storage Temperature   | Tstg   | -40°C~+100°C                | °C   |
| Reverse Voltage       | VR     | 5                           | V    |
| Soldering Temperature | Tsol   | Reflow Soldering:250°C/5sec |      |

\*Pulse width  $\leq$  1msec duty  $\leq$  1/10

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

| Items                    | Symbol           | Condition | Min. | Typ. | Max  | Unit |
|--------------------------|------------------|-----------|------|------|------|------|
| Forward Voltage          | VF               | IF = 20mA | 2.80 | ---  | 3.60 | V    |
| Reverse Current          | IR               | VR = 5V   |      |      | 10   | uA   |
| Peak Emission Wavelength | $\lambda_p$      | IF = 20mA |      | 470  |      | nm   |
| Dominant Wavelength      | $\lambda_D$      | IF = 20mA |      | 468  |      | nm   |
| Luminous Intensity       | IV               | IF = 20mA |      | 120  |      | mcd  |
| 50% Power Angle          | 2 $\theta_{1/2}$ | IF = 20mA | ---  | 140  | ---  | Deg  |

■ Material

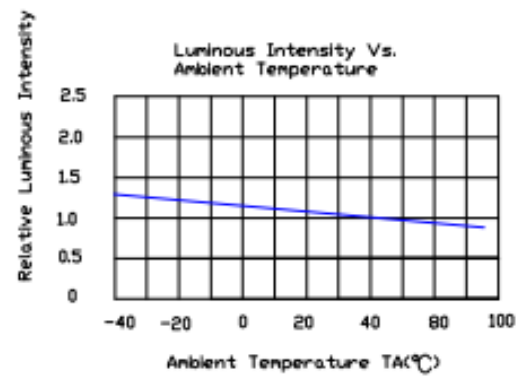
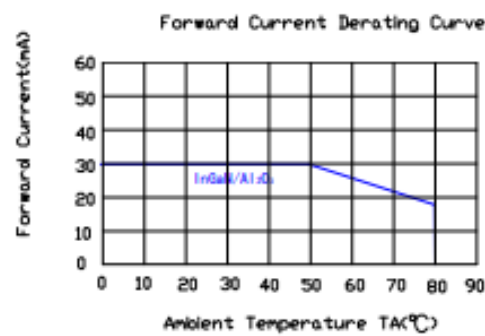
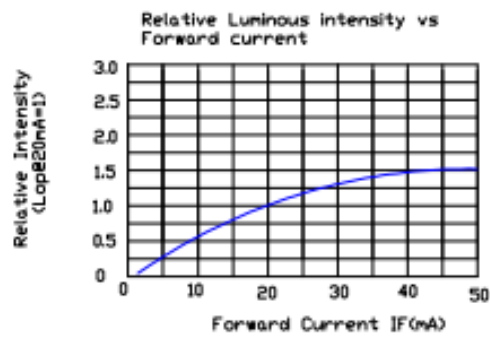
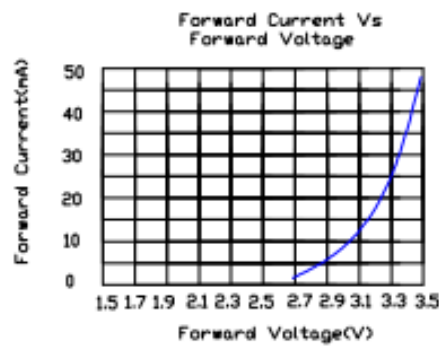
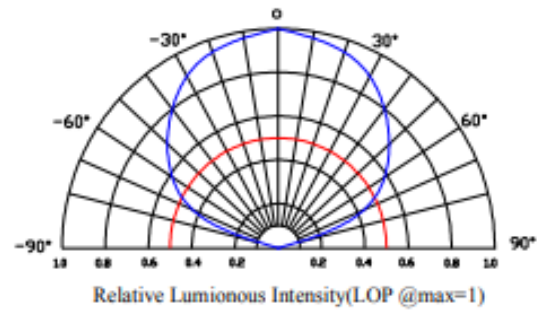
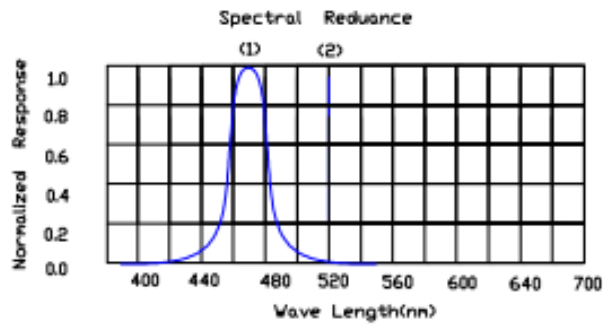
| Item     | Reflector | Wire | Encapsulate | Chip  |
|----------|-----------|------|-------------|-------|
| Material | /         | Gold | Silicone    | InGaN |

Note:

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

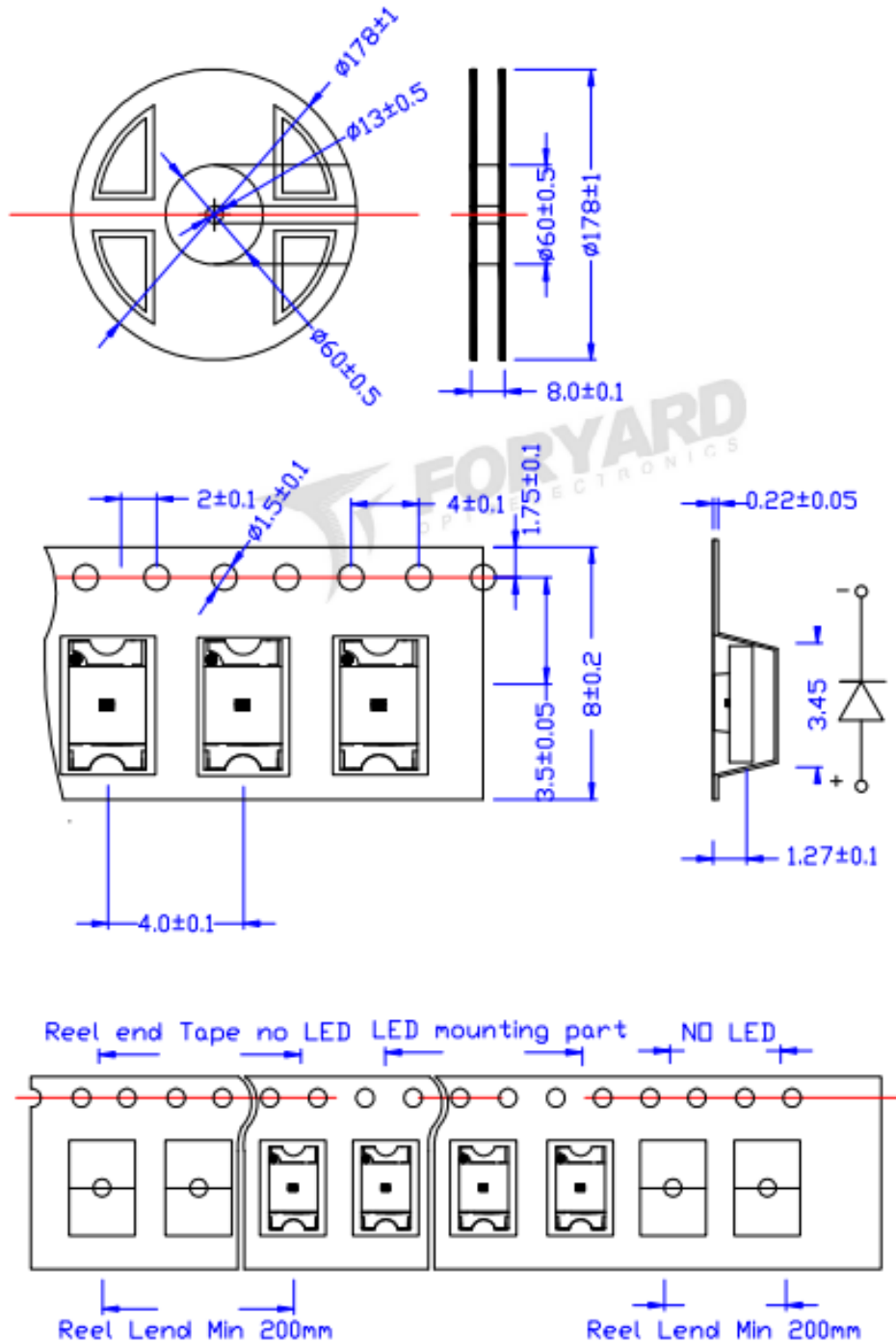
**Model No.: FYLS-1206UBC**

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



Model No.: FYLS-1206UBC

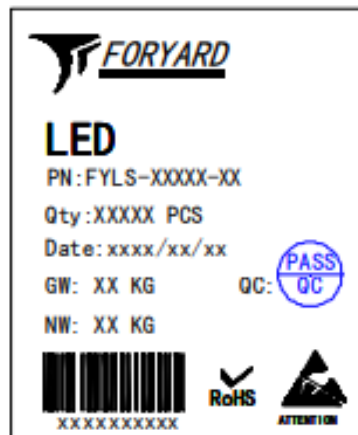
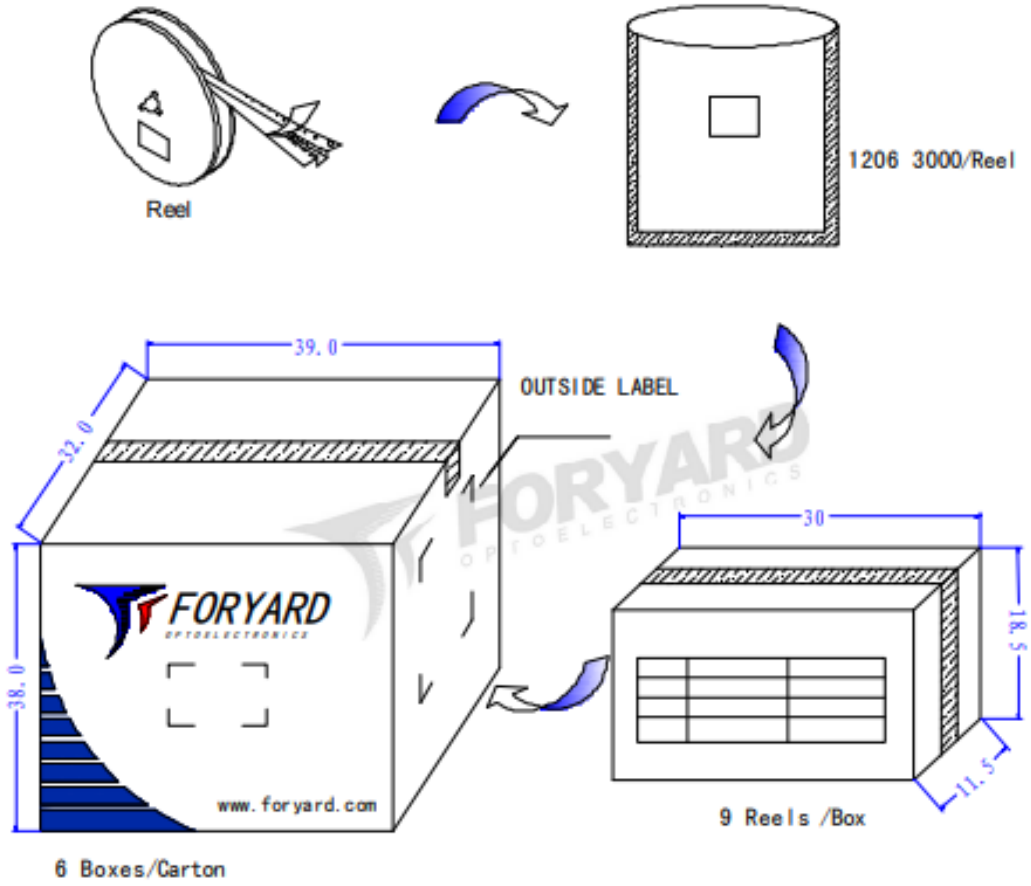
■ Packing Diagram



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

Model No.: FYLS-1206UBC

■ Packing Diagram



OUTSIDE LABEL

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

**Model No.: FYLS-1206UBC**

**■ Precautions for use:**

**1. Storage**

To prevent moisture absorption into SMD LEDs during the transportation and storage , the LEDs are packed in a moisture-barrier bag. Desiccants and a humidity indicator are packed together with the LEDs as secondary protection

The shelf life of LEDs stored in the original sealed bag at <math> < 40^{\circ}\text{C}</math> and <math> < 90\% \text{ RH}</math> is 12 months. Baking is required if the shelf life has expired

Before opening the packaging , check for air leaks in the bag.

After the bag is opened, the SMD LEDs must be stored at <math> < 30^{\circ}\text{C}</math> and <math> < 60\% \text{ RH}</math>. Under these conditions, SMD LEDs must be used within 24 hours. If the LEDs are not within 24 hours after removal from the bag , baking is required Take the material out of the packaging bag before baking. Do not open the oven door frequently during the baking process.

**2. Soldering**

**(1) Manual soldering with a soldering iron**

Use a soldering iron of less than 25 watts is recommended . The iron temperature must be kept below <math> 315^{\circ}\text{C}</math> And soldering time no more than 2 seconds.

The epoxy resin of an SMD LED should not contact the tip of the soldering iron.

No mechanical stress should be exerted on the resin portion of an SMD LED during soldering.

Handling of an SMD LED should be done only when the package has been cooled down to below <math> 40^{\circ}\text{C}</math>

**(2)Reflow soldering**

Temperature profile

