

## FYLS- 1204UWC

Radiation pattern.

### Features:

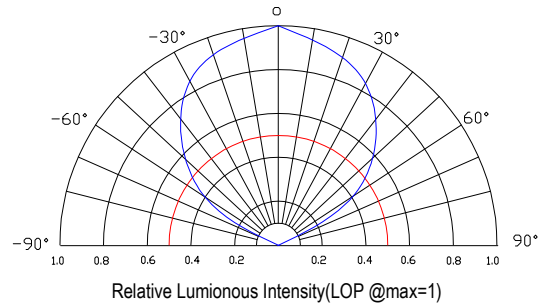
- Compatible with automatic placement equipment
- Compatible with reflow solder process.

### Applications:

- Automotive-Telecommunication
- Indicators
- LCD Back-lights
- Illuminations

### Descriptions:

- Dice material: InGaN.
- Emitting Color: White
- Lens Color: Color Diffused



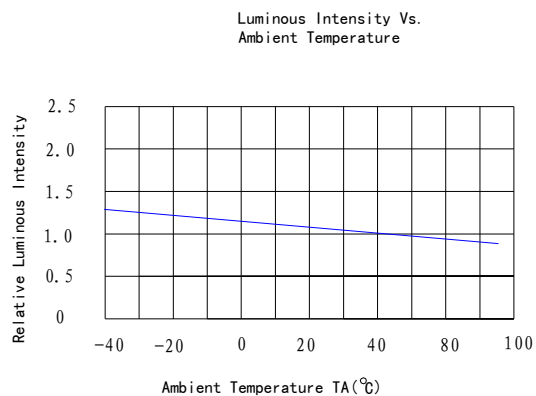
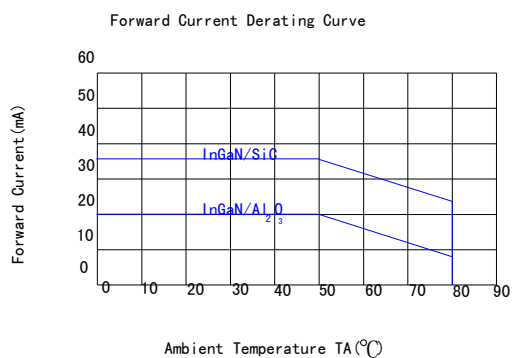
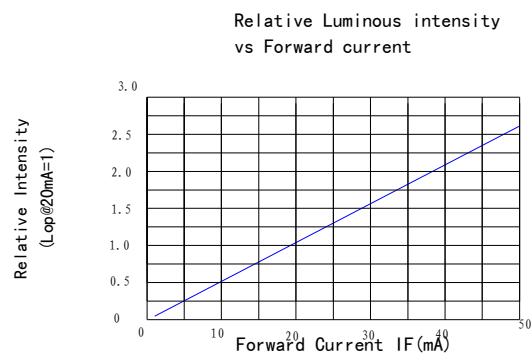
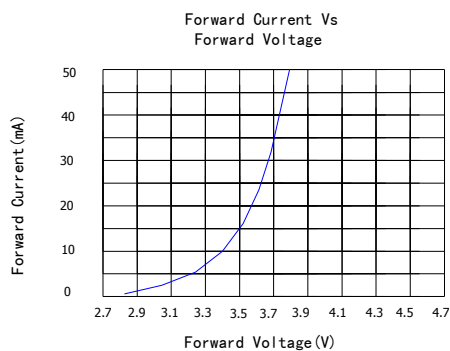
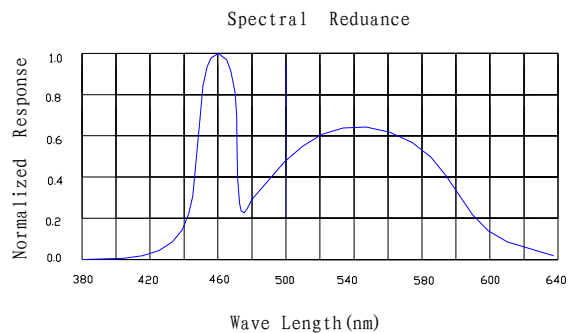
### Absolute maximum ratings (Ta=25 °c)

| Parameter                                           | MAX.                | Unit  |
|-----------------------------------------------------|---------------------|-------|
| Power Dissipation                                   | 70                  | mW    |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse) | 100                 | mA    |
| Continuous Forward Current                          | 20                  | mA    |
| Derating Linear From 25°C                           | 0.4                 | mA/°C |
| Operating Temperature Range                         | -30°C to +80°C      |       |
| Storage Temperature Range                           | -40°C to +100°C     |       |
| Lead Soldering Temperature[4mm(.157") From Body]    | 260°C for 5 Seconds |       |

### Electrical and optical characteristics(Ta=25 °c)

| Parameter               | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-------------------------|--------|------|------|------|------|----------------|
| Luminous Intensity      | IV     | –    | 50   | –    | mcd  | IF= 20mA       |
| Viewing Angle           | 2θ1/2  | 100  | 110  | 120  | Deg  |                |
| Chromaticity coordinate | x      |      | 0.29 |      |      |                |
|                         | y      |      | 0.30 |      |      |                |
| Forward Voltage         | VF     |      | 2.9  | 3.2  | V    | VR=5V          |
| Reverse Current         | IR     |      |      | 10   | μA   |                |

## Typical Electrical Characteristics Curves (25 °c Ambient Temperature Unless Otherwise Noted)



## ◆ Precautions For Use

### ● Over-current-proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)

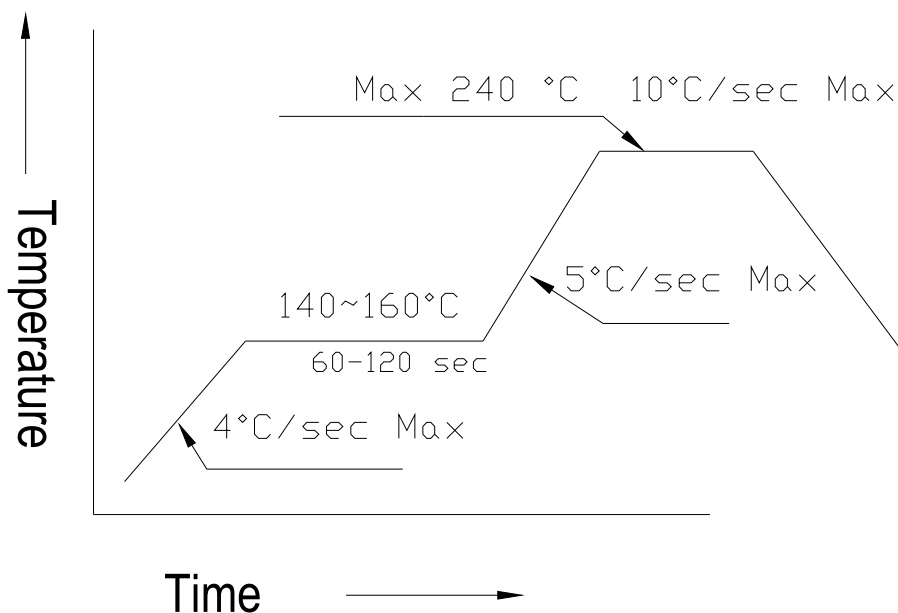
### ● Storage

1. The operation of temperature and R.H are:  $5^{\circ}\text{C} - 30^{\circ}\text{C}$ , R.H. 60% Max.
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating reagent. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date).
3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The Condition is:  $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$  for 15 hrs.

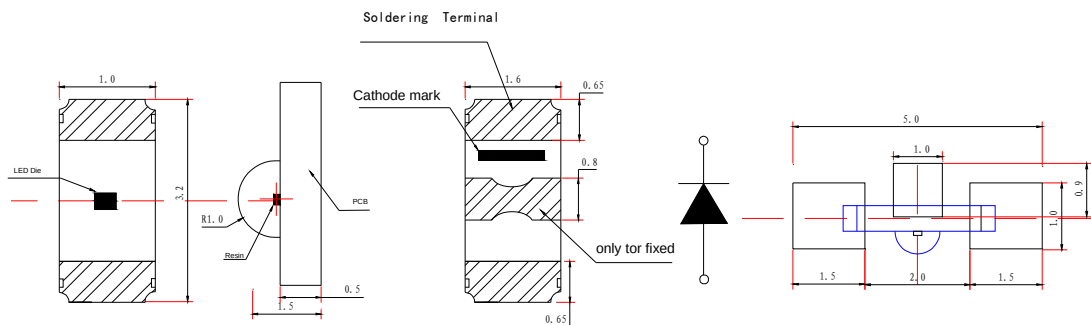
## ◆ Soldering Iron:

- Temperature at tip of iron:  $300^{\circ}\text{C}$  Max. (25W Max)
- Soldering time:  $3 \pm 1$  sec.

## ◆ Reflow Temp./Time:



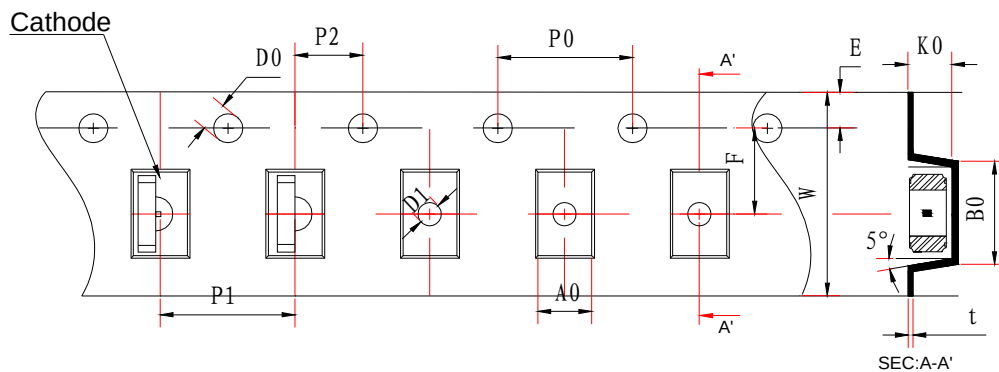
## ◆ Package Dimensions of Device



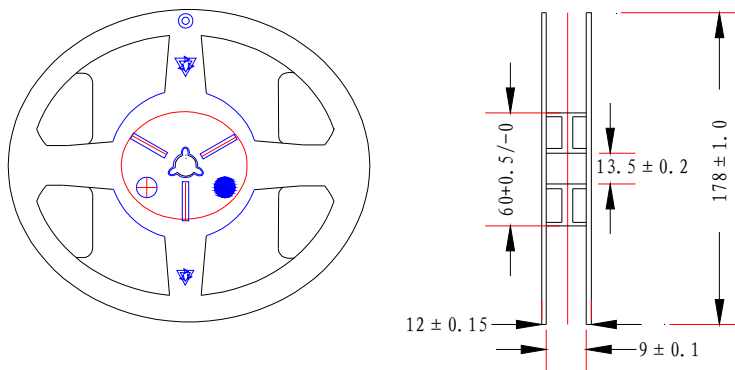
Unit:mm

## ◆ Tape Specification:3000pcs Per Reel.

| Packing Size |       |       |       |       |         |       |       |      |
|--------------|-------|-------|-------|-------|---------|-------|-------|------|
| Item         | W     | P1    | E     | F     | D0      | D1    | P0    | Unit |
| Spec.        | 8.00  | 4.00  | 1.75  | 3.50  | 1.50    | 1.0   | 4.00  | mm   |
| Tolerance    | ±0.20 | ±0.10 | ±0.10 | ±0.05 | +0.1/-0 | ±0.05 | ±0.05 | mm   |
| Item         | 10P0  | P2    | A0    | B0    | K0      | T     |       | Unit |
| Spec.        | 40.00 | 2.00  | 1.60  | 3.35  | 1.15    | 0.22  |       | mm   |
| Tolerance    | ±0.20 | ±0.05 | ±0.10 | ±0.10 | ±0.10   | ±0.05 |       | mm   |

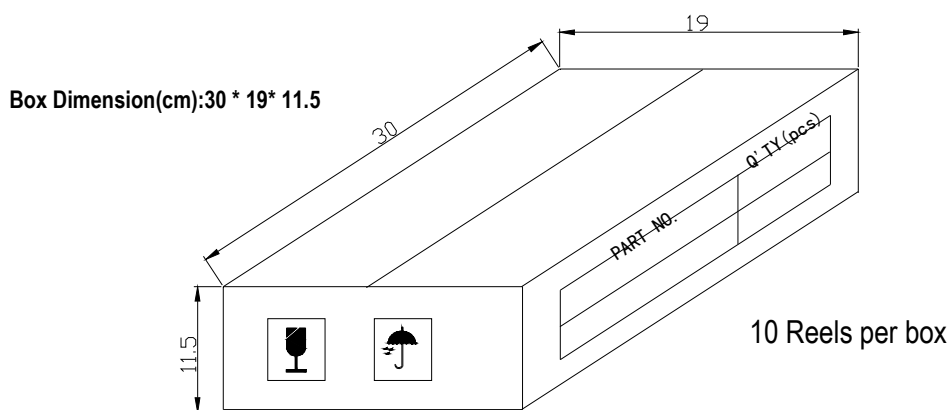
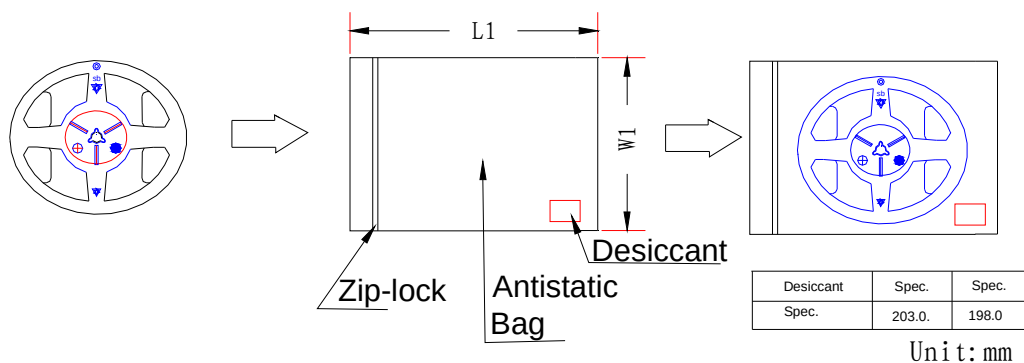


## ◆ Package Dimensions of Reel:

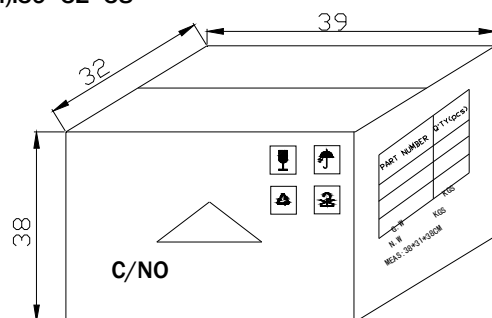


Unit:mm

## ◆ Packing and Shipping Spec.



CARTON  
Dimension(cm):39\*32\*38



6boxes/carton  
0603B/0603/0805:  
4000pcs\*10Reels\*6boxes

0805B/1206B/<sup>1206</sup>/<sub>1210</sub>/1204:  
3000pcs\*10Reels\*6boxes\*

3528:2000pcs\*10Reels\*6boxes  
5050:1000pcs\*8Reels\*6boxes