

**FYLS – 1210UR/UBC**

Radiation pattern.

**Features:**

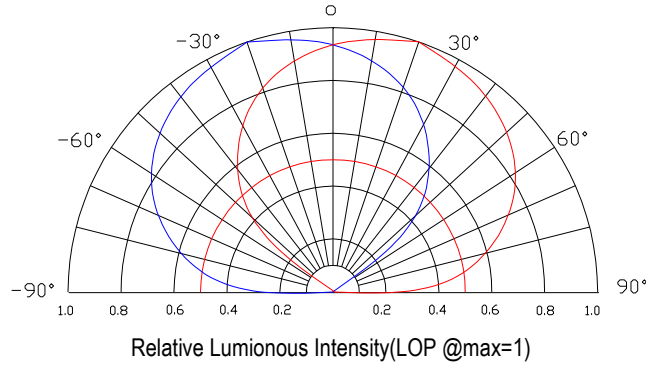
- Compatible with automatic placement equipment
- Compatible with reflow solder process.

**Applications:**

- Automotive-Telecommunication
- Indicators
- Lcd Back-lights
- Illuminations

**Descriptions:**

- Dice material: R: AlGaAs.  
B: InGaN
- Emitting Color: R: Red.  
G: Blue
- Lens Color: Water clear.



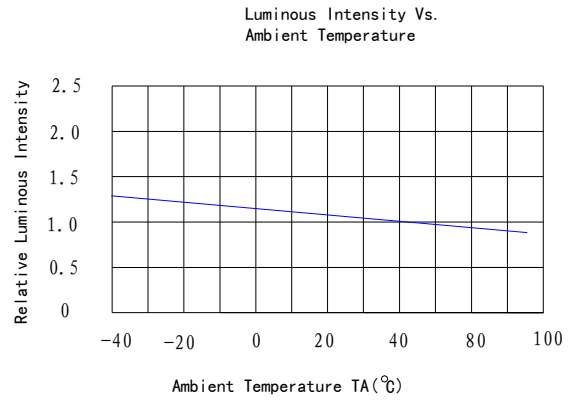
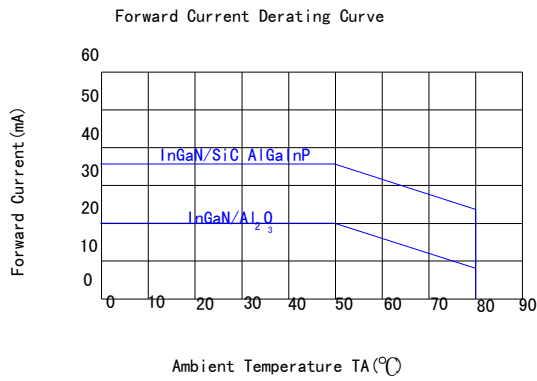
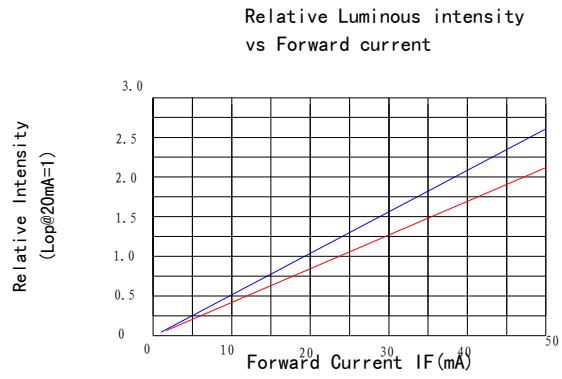
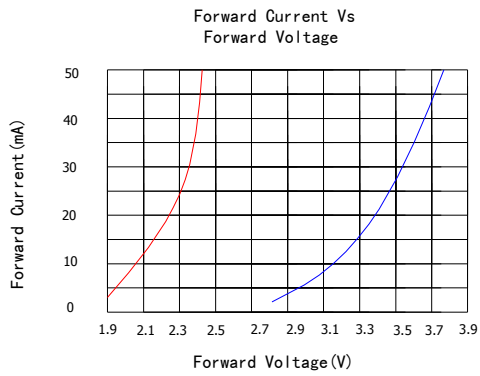
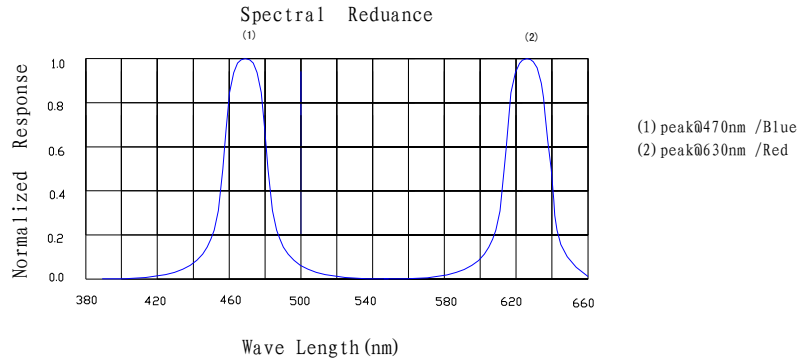
**Absolute maximun ratings(Ta=25 °c)**

Parameter	MAX.		Unit
	R	B	
Power Dissipation	50	70	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse)	100		mA
Continuous Forward Current	30		mA
Derating Linear From 25°C	0.4		mA/°C
Operating Temperature Range	-30°C to +80°C		
Storage Temperature Range	-40°C to +85°C		

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	R	-	80	-	mcd	IF=20mA
	B	-	38	-		
Viewing Angle	2θ1/2	120	130	140	Deg	
Peak Emission Wavelength	R	625	630	635	nm	
	B	465	470	475		
Dominant Wavelength	R	620	625	630	nm	
	B	463	468	473		
Spectral Line Half-Width	R	25	30	35	nm	
	B	23	28	33		
Forward Voltage	R	-	2.1	2.4	V	
	B	-	3.2	3.6		
Reverse Current	IR			10	µA	VR=5V

**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)

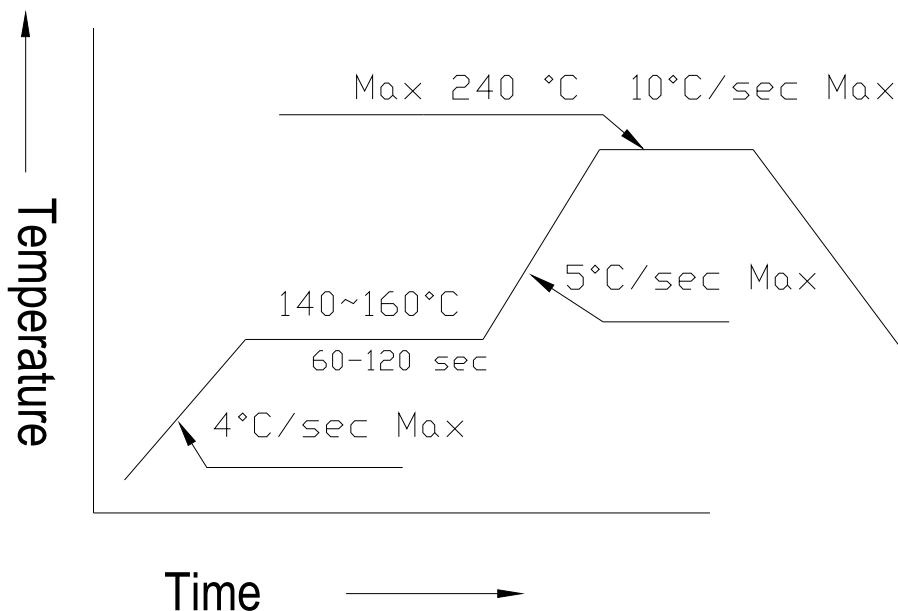
● **Storage**

1. The operation of temperature and R.H are:  $5\text{ }^{\circ}\text{C} - 30\text{ }^{\circ}\text{C}$ , 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 damp proof 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:  $60\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$  for 15 hrs.

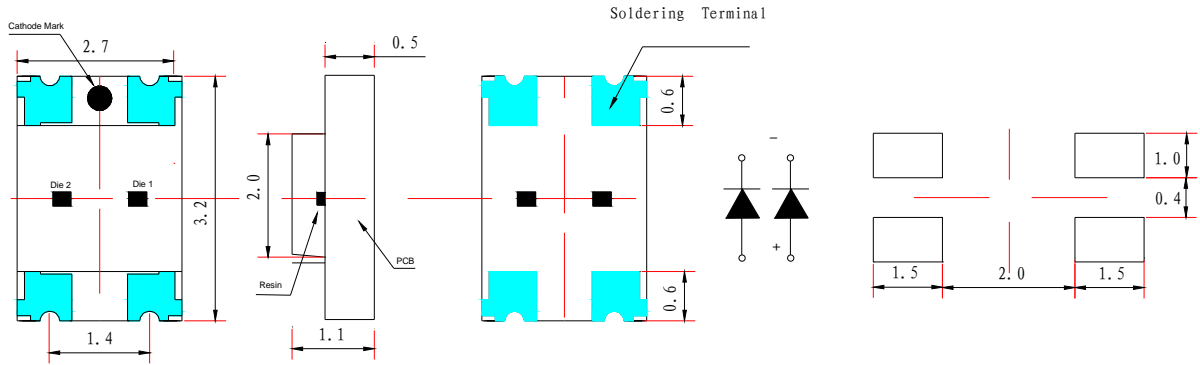
◆ **Soldering Iron:**

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

◆ **Reflow Temp./Time:**



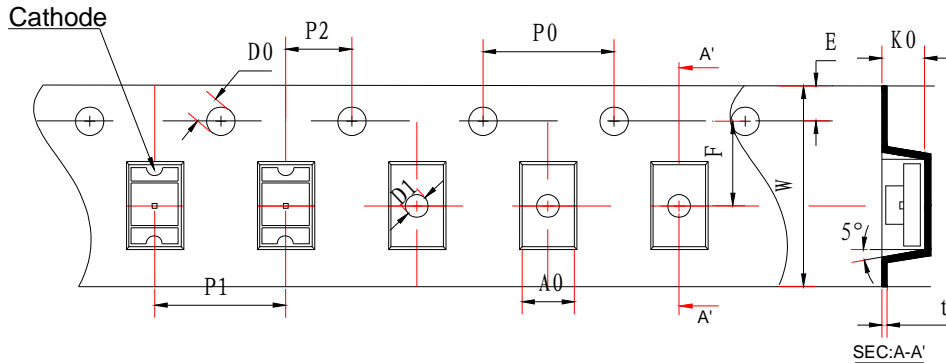
### ◆ Package Dimensions of Device



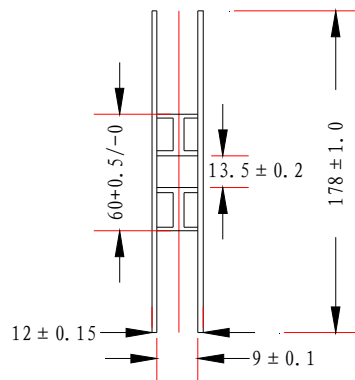
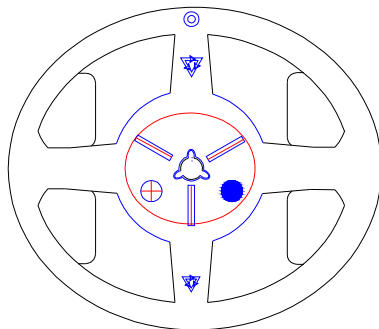
Unit:mm

### ◆ 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	1.00	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	2.80	3.35	1.35	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.

