

### ✧ Features:

- 3.2mm x 1.0mm SMT LED, 1.50mm thickness
- Mono-color type
- Soldering methods :All SMT assembly methods
- Comply ROHS standard

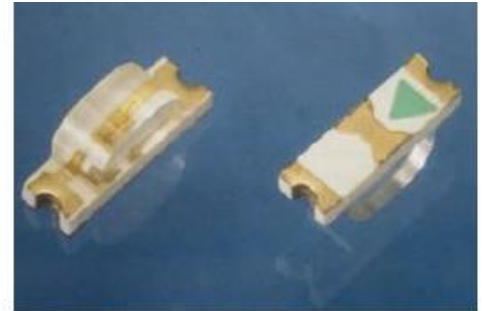
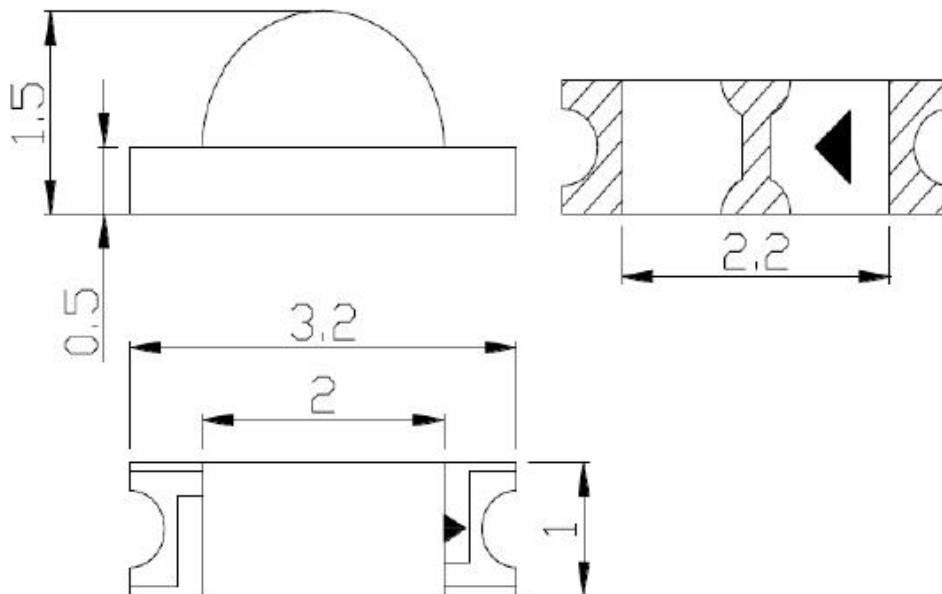
### ✧ Description

The Yellow source color devices are made with GaASP/GaP on sapphire Light Emitting Diode.

### ✧ Application

- Optical indicator
- Indicator and backlighting in telephone and fax
- Flat backlight for LCD, switch and symbol
- Light pipe application
- General use

### ✧ Package Dimensions



#### NOTES:

1. All dimensions are in millimeter[unit];
2. Tolerance is  $\pm 0.1\text{mm}$  ( $0.004''$ ) unless other specified;
3. Specifications are subject to change without notice.

Emitted Color	Lens Color	Chip Material
Yellow	Water clear	GaASP/GaP

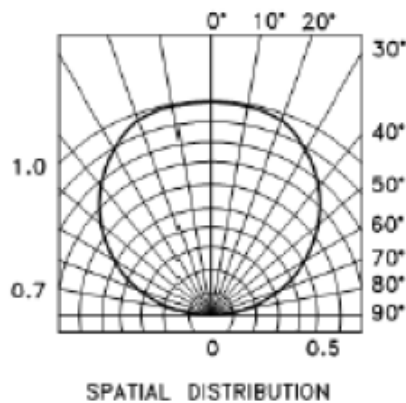
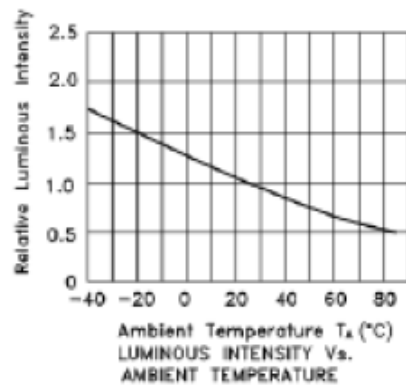
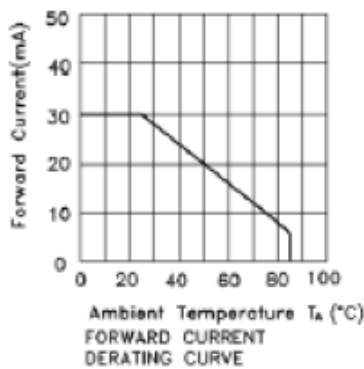
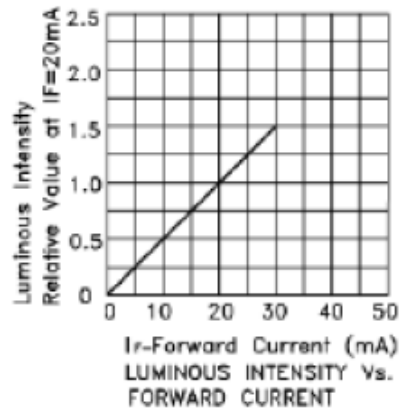
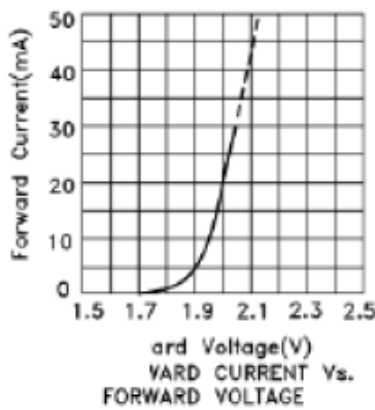
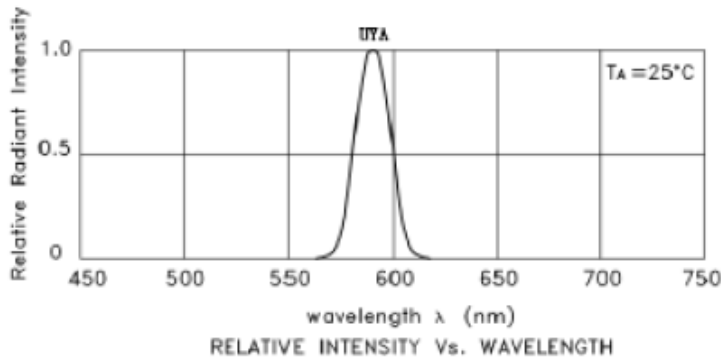
#### ◇ Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

Item	Symbol	Maximum	Unit
Power Dissipation	PD	75	mW
Continuous Forward Current	$I_{Fmax}$	30	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	$I_{FP}$	80	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature Range	$T_{opr}$	-40 to+85	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to+85	$^\circ\text{C}$

#### ◇ Electrical/Optical Characteristics( $T_a=25^\circ\text{C}$ )

Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	--	1.9	2.3	V
Luminous Intensity	$I_V$	$I_F=20\text{mA}$	70	150	--	mcd
Dominate Wavelength	$\lambda_d$	$I_F=20\text{mA}$	588	--	596	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	---	160	---	Deg
Reverse Current	IR	$V_R=5\text{V}$	---	---	10	$\mu\text{A}$

### ❖ Typical Electro-Optical Characteristics Curves

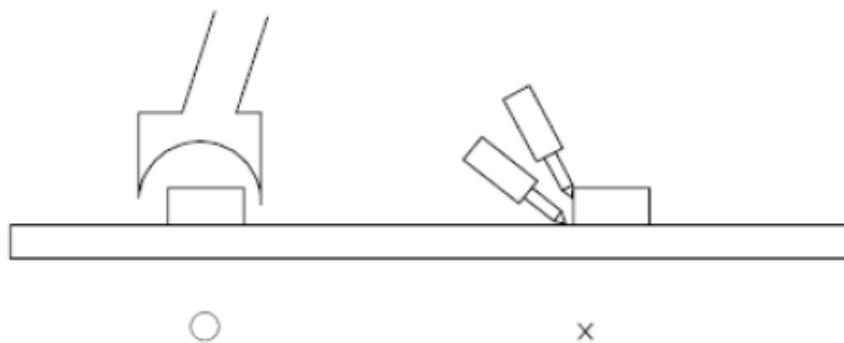


❖ Reliability Test Items And Conditions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty	Ac/Re
1	Reflow	TEMP:260±5°C; Min.5Sec	6 min	22pcs	0/1
2	Low Temperature Storage	TEMP:-40°C	1000hrs	22pcs	0/1
3	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
4	High Temperature	85°C	1000hrs	22pcs	0/1
5	High Humidity	85%R.H.	1000hrs	22pcs	0/1

**Rework**

1. Customer must finish rework within 5 sec under 245°C.
2. The head of iron can not touch copper foil.
3. Twin-head type is preferred.



## ❖ Precautions For Use

### 1. Over-current-proof

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

### 2. Storage time

2.1 The operation of Temperature and RH are :  $5^{\circ}\text{C}\sim 35^{\circ}\text{C}$  , RH60%.

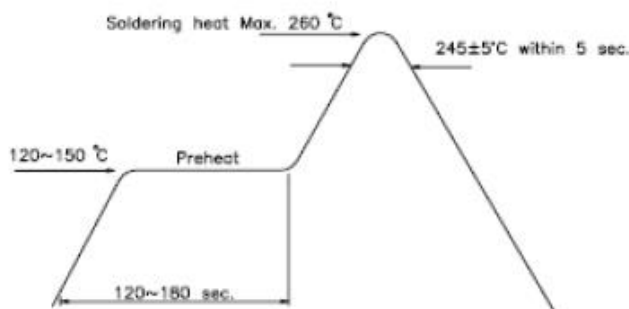
2.2 Once the package is opened, the products should be used within a week.

Otherwise, they should be kept in a damp proof box with descanting agent. Considering the tape life , we suggest our customers to use our products within a year(from production date).

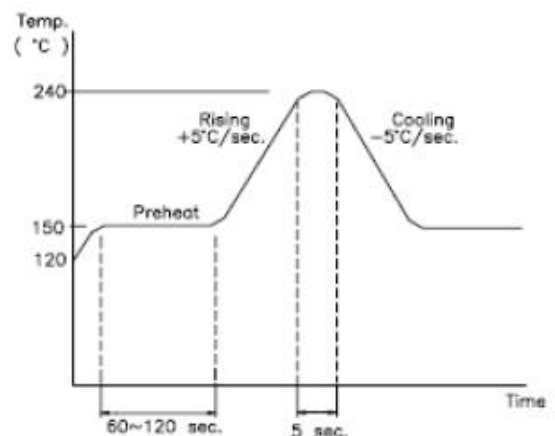
2.3 If opened more than one week in an atmosphere  $5^{\circ}\text{C}\sim 35^{\circ}\text{C}$  , RH 60%, they should be treated at  $60^{\circ}\text{C}\pm 5^{\circ}\text{C}$  for 15hrs.

2.4 When you discover that the desiccant in the package has a pink color (Normal = blue) , you should treat them in the same conditions as 2.3.

## Soldering heat



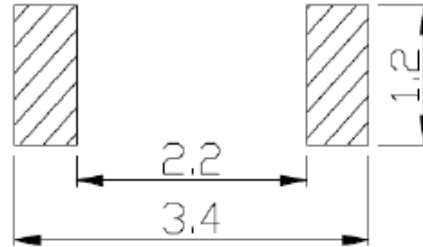
## Reflow Temp / Time



## Soldering Iron

Basic spec is  $\leq 5$  sec when  $260^{\circ}\text{C}$ . If temperature is higher, time should be shorter ( $+10^{\circ}\text{C}\rightarrow -1$ sec). Power dissipation of Iron should be smaller than  $15$  W , and temperature should be controllable. Surface temperature of the device should be under  $230^{\circ}\text{C}$ .

❖ **Recommended Soldering Pad Dimensions**



❖ **Tape Specification: 2,000PCS per reel**

