

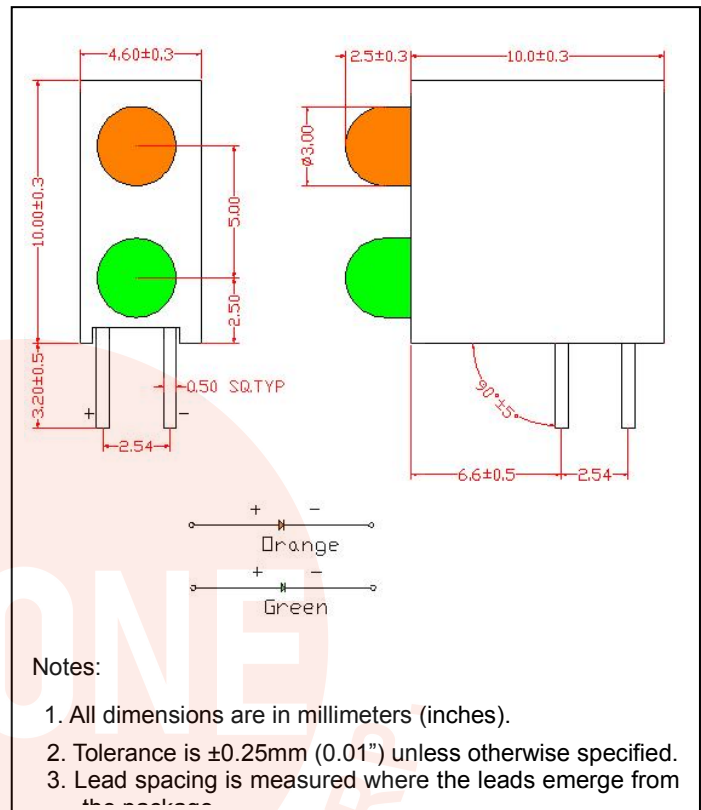
## ● Features:

1. Chip material: Gap(Orange)  
GaP(Green)
2. Emitted color : Orange and Green
3. Lens Appearance :Orange Diffused  
and Green Diffused
4. Designed for ease in circuit board assembly.
5. Black case enhance contrast ratio.
6. Solid state light source.
7. Reliable and rugged.
8. 3mm diameter package.
9. This product don't contained restriction  
substance, compliance ROHS standard.

## ● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

## ● Package dimensions



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

| Parameter              | Symbol          | Orange               | Green | Unit |
|------------------------|-----------------|----------------------|-------|------|
| Power Dissipation      | Pd              | 80                   | 80    | mW   |
| Forward Current        | I <sub>F</sub>  | 30                   | 30    | mA   |
| Peak Forward Current*1 | I <sub>FP</sub> | 150                  | 150   | mA   |
| Reverse Voltage        | V <sub>R</sub>  | 5                    |       | V    |
| Operating Temperature  | Topr            | -30°C~80°C           |       |      |
| Storage Temperature    | Tstg            | -40°C~85°C           |       |      |
| Soldering Temperature  | Tsol            | 260°C(for 5 seconds) |       |      |

\*1Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

● Electrical and optical characteristics(Ta=25°C)

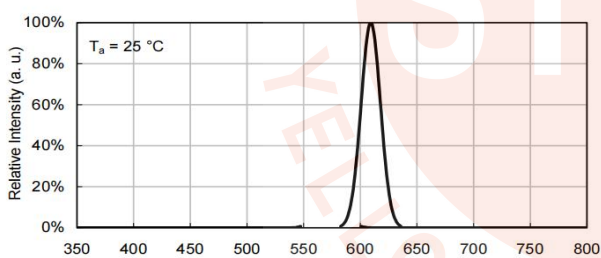
| Parameter                | Symbol          | Condition         | Color           | Min.       | Typ.       | Max.       | Unit          |
|--------------------------|-----------------|-------------------|-----------------|------------|------------|------------|---------------|
| Forward Voltage          | $V_F$           | $I_F=20\text{mA}$ | Orange<br>Green | 1.8<br>1.8 |            | 2.6<br>2.6 | V             |
| Luminous Intensity       | $I_v$           | $I_F=20\text{mA}$ | Orange<br>Green | 10<br>40   |            | 60<br>80   | mcd           |
| Reverse Current          | $I_R$           | $V_R=5\text{V}$   | Orange<br>Green | -          | -          | 10         | $\mu\text{A}$ |
| Peak Wave Length         | $\lambda_p$     | $I_F=20\text{mA}$ | Orange<br>Green | -          | 607<br>570 | -          | nm            |
| Dominant Wave Length     | $\lambda_d$     | $I_F=20\text{mA}$ | Orange<br>Green | 600<br>565 |            | 610<br>575 | nm            |
| Spectral Line Half-width | $\Delta\lambda$ | $I_F=20\text{mA}$ | Orange<br>Green | -          | 30         | -          | nm            |
| Viewing Angle            | $2\theta_{1/2}$ | Green             | Orange<br>Green | -          | 45<br>50   | -          | deg           |

● Typical Electro-Optical Characteristics Curves

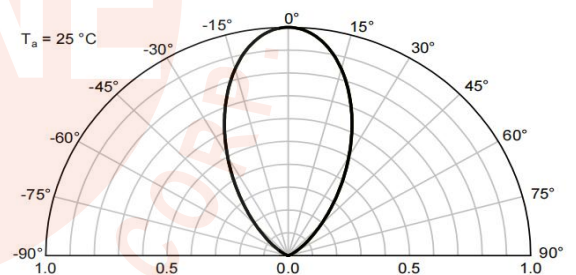
Orange

TECHNICAL DATA

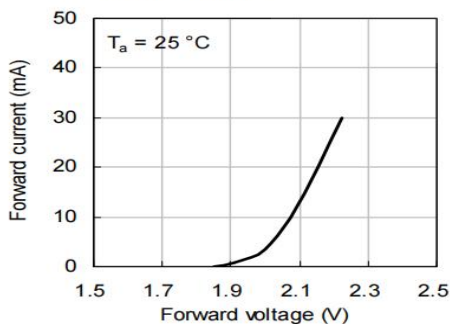
RELATIVE INTENSITY vs. WAVELENGTH



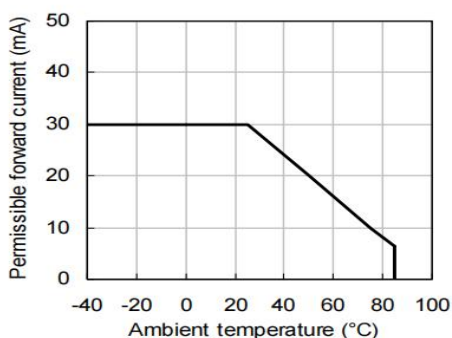
SPATIAL DISTRIBUTION



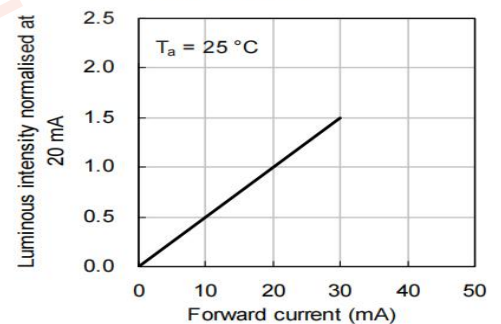
Forward Current vs. Forward Voltage



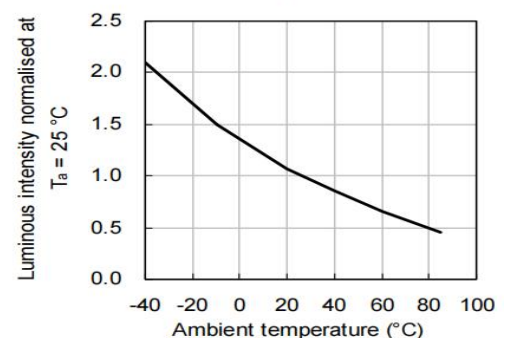
Forward Current Derating Curve



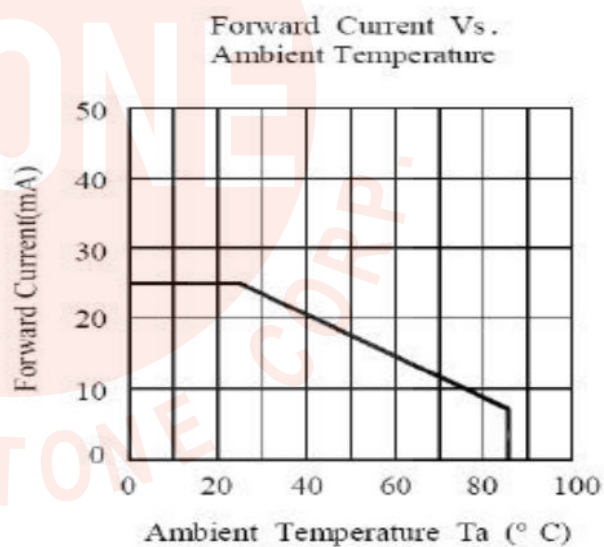
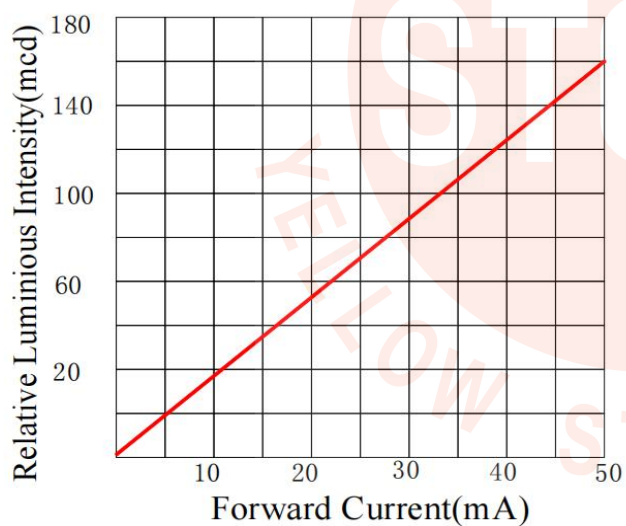
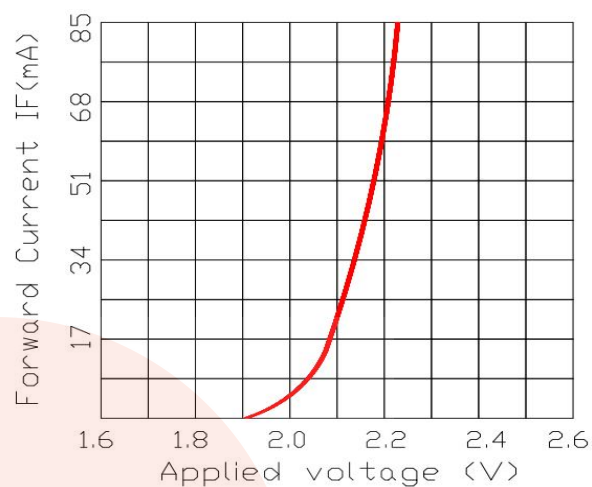
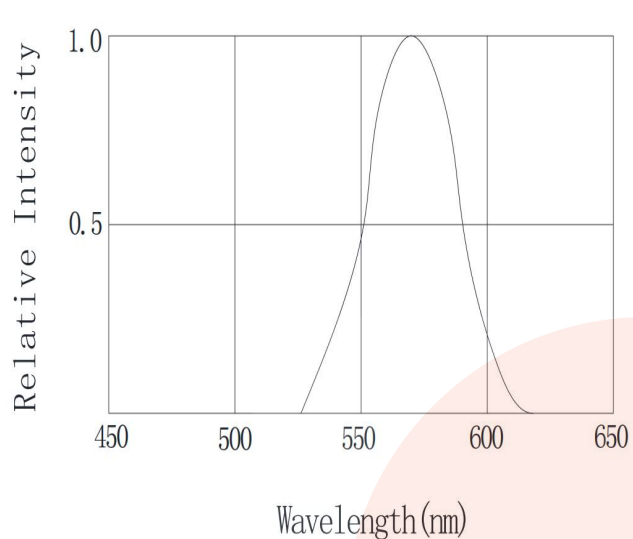
Luminous Intensity vs. Forward Current



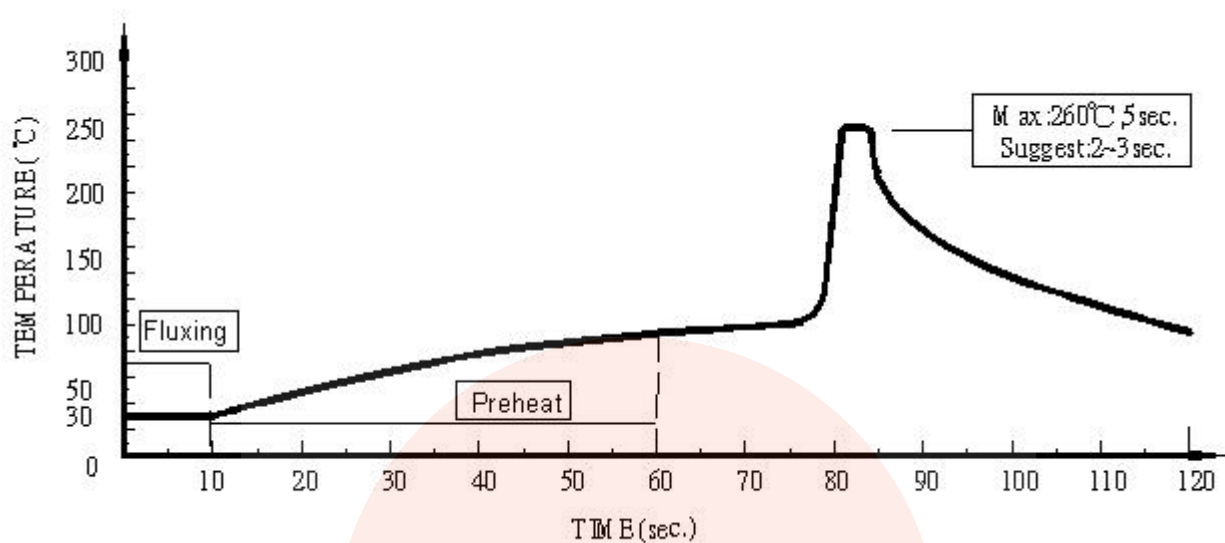
Luminous Intensity vs. Ambient Temperature



Green



## ●Dip Soldering



1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

## ●IRON Soldering

A: Max: 350°C Within 3 sec. One time only.

B: The products of 3mm without flange, welding condition of flat plate PCB Max: 350°C Within 2 sec. One time only

