

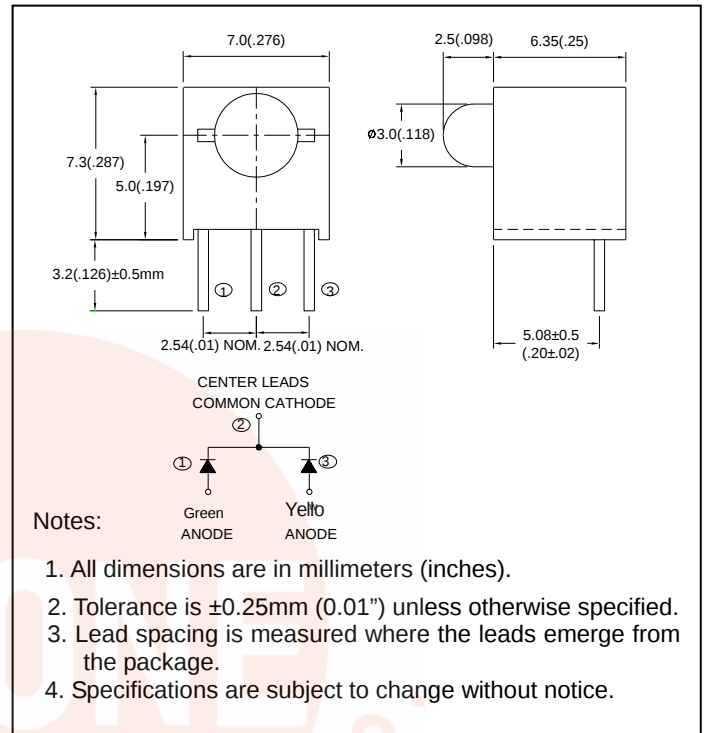
### ● Features:

1. Chip material: GaAsP/GaP(Yellow) and GaP/GaP(Green)
2. Emitted color : Yellow and Green
3. Lens Appearance : White 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. 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( $T_a=25^\circ\text{C}$ )

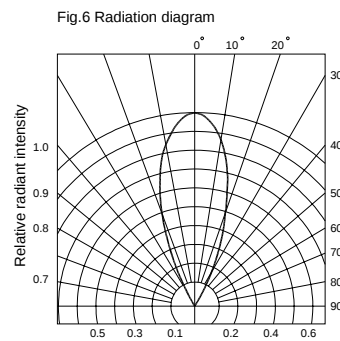
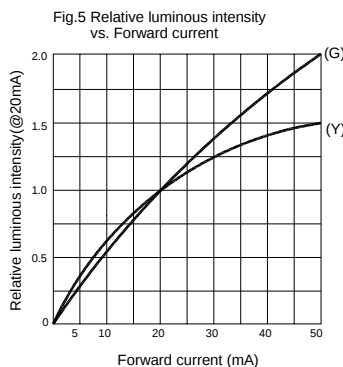
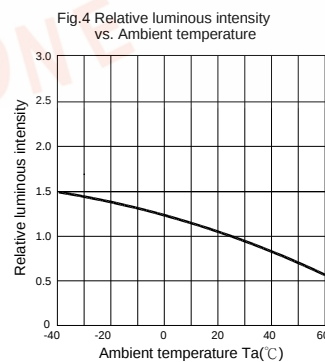
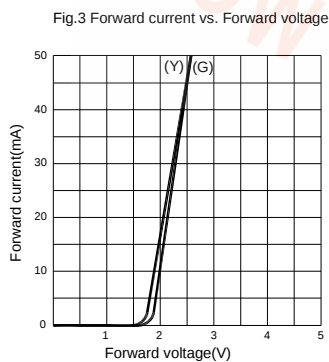
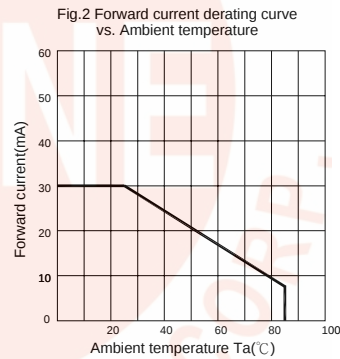
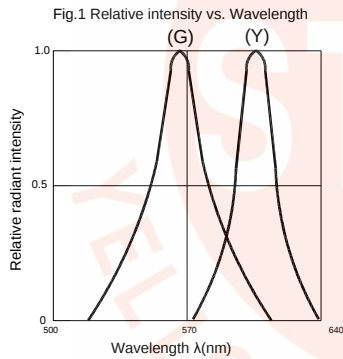
| Parameter                  | Symbol    | Yellow                                     | Green | Unit |
|----------------------------|-----------|--------------------------------------------|-------|------|
| Power Dissipation          | $P_d$     | 80                                         | 80    | mW   |
| Forward Current            | $I_F$     | 30                                         | 30    | mA   |
| Peak Forward Current       | $I_{FP}$  | 150                                        | 150   | mA   |
| Reverse Voltage            | $V_R$     | 5                                          |       | V    |
| Operating Temperature      | $T_{opr}$ | $-40^\circ\text{C} \sim 85^\circ\text{C}$  |       |      |
| Storage Temperature        | $T_{stg}$ | $-40^\circ\text{C} \sim 100^\circ\text{C}$ |       |      |
| Soldering Temperature      | $T_{sol}$ | 260°C max (for 5 seconds)                  |       |      |
| Hand Soldering Temperature | $T_{sol}$ | 350°C max(for 3 seconds )                  |       |      |

\*1 Condition for  $I_{FP}$  is pulse of 1/10 duty and 0.1msec width.

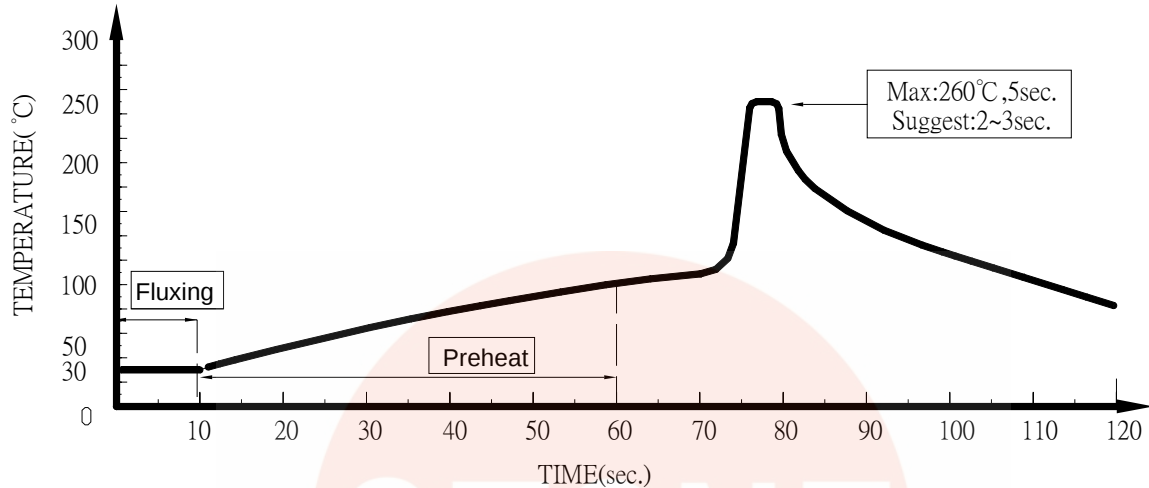
● Electrical and optical characteristics(Ta=25°C)

| Parameter                | Symbol          | Condition         | Color           | Min.       | Typ.       | Max.       | Unit          |
|--------------------------|-----------------|-------------------|-----------------|------------|------------|------------|---------------|
| Forward Voltage          | $V_F$           | $I_F=20\text{mA}$ | Yellow<br>Green | -          | 2.1<br>2.2 | 2.6<br>2.6 | V             |
| Luminous Intensity       | $I_v$           | $I_F=20\text{mA}$ | Yellow<br>Green | -          | 30<br>35   | -          | mcd           |
| Reverse Current          | $I_R$           | $V_R=5\text{V}$   | Yellow<br>Green | -          | -          | 100        | $\mu\text{A}$ |
| Peak Wave Length         | $\lambda_p$     | $I_F=20\text{mA}$ | Yellow<br>Green | -          | 585<br>568 | -          | nm            |
| Dominant Wave Length     | $\lambda_d$     | $I_F=20\text{mA}$ | Yellow<br>Green | 580<br>564 | -          | 595<br>574 | nm            |
| Spectral Line Half-width | $\Delta\lambda$ | $I_F=20\text{mA}$ | Yellow<br>Green | -          | 35<br>30   | -          | nm            |
| Viewing Angle            | $2\theta_{1/2}$ | $I_F=20\text{mA}$ | Yellow<br>Green | -          | 40         | -          | deg           |

● Typical Electro-Optical Characteristics Curves



## ● 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 : For 3mm LED without flange, if the LED epoxy lays flat on the PCB, the welding condition is 350°C within 2 seconds, one time only.

