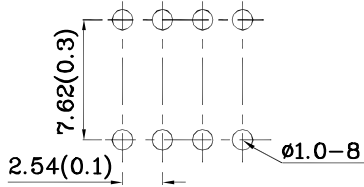


## Features

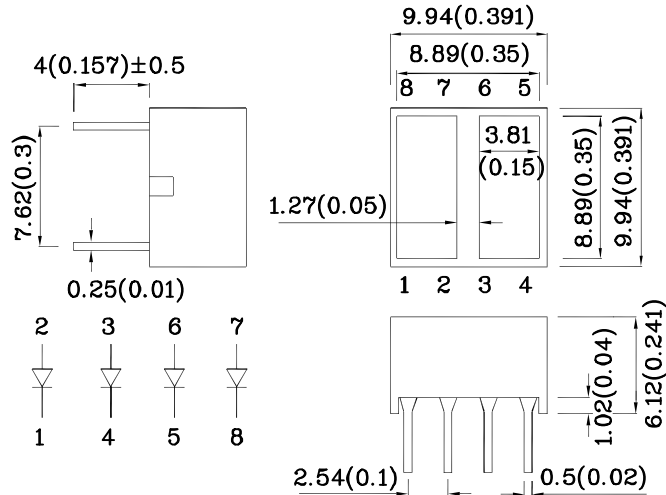
- Robust package
- Uniform light disbursement
- Ideal for backlighting logos or icons
- Excellent for flush mounting
- RoHS compliant



## RECOMMENDED PCB LAYOUT



## Package Schematics



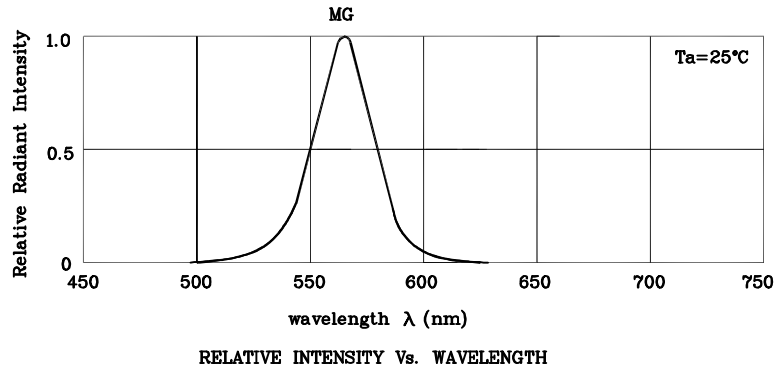
### Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. Specifications are subject to change without notice.

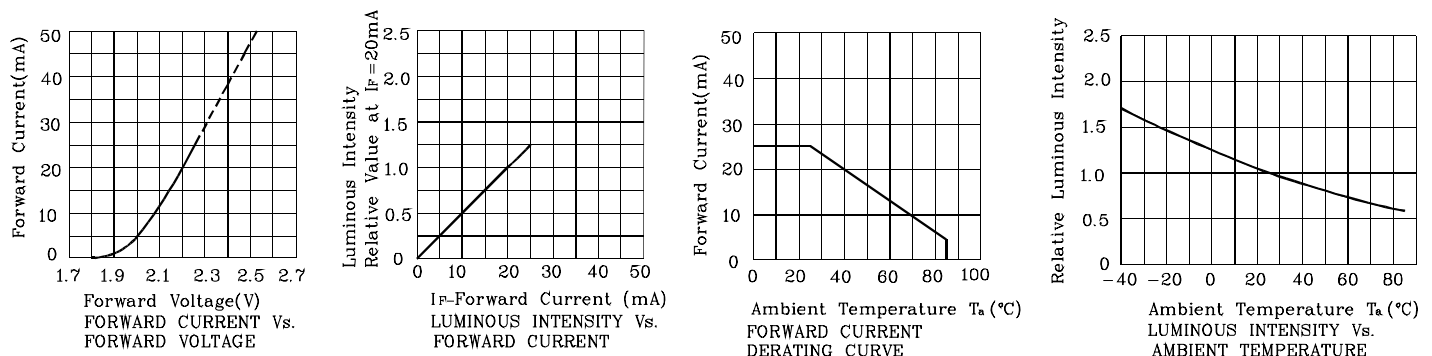
| Absolute Maximum Ratings<br>(T <sub>A</sub> =25°C)             |                       | MG<br>(GaP) | Unit |
|----------------------------------------------------------------|-----------------------|-------------|------|
| Reverse Voltage                                                | V <sub>R</sub>        | 5           | V    |
| Forward Current                                                | I <sub>F</sub>        | 25          | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>       | 140         | mA   |
| Power Dissipation                                              | P <sub>D</sub>        | 62.5        | mW   |
| Operating Temperature                                          | T <sub>A</sub>        | -40 ~ +85   | °C   |
| Storage Temperature                                            | T <sub>stg</sub>      | -40 ~ +85   |      |
| Lead Solder Temperature<br>[2mm Below Package Base]            | 260°C For 3-5 Seconds |             |      |

| Operating Characteristics<br>( $T_A=25^\circ\text{C}$ )                     |                 | MG<br>(GaP) | Unit          |
|-----------------------------------------------------------------------------|-----------------|-------------|---------------|
| Forward Voltage (Typ.)<br>( $I_F=20\text{mA}$ )                             | $V_F$           | 2.2         | V             |
| Forward Voltage (Max.)<br>( $I_F=20\text{mA}$ )                             | $V_F$           | 2.5         | V             |
| Reverse Current (Max.)<br>( $V_R=5\text{V}$ )                               | $I_R$           | 10          | $\mu\text{A}$ |
| Wavelength of Peak<br>Emission (Typ.)<br>( $I_F=20\text{mA}$ )              | $\lambda_P$     | 565         | nm            |
| Wavelength of Dominant<br>Emission (Typ.)<br>( $I_F=20\text{mA}$ )          | $\lambda_D$     | 568         | nm            |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>( $I_F=20\text{mA}$ ) | $\Delta\lambda$ | 30          | nm            |
| Capacitance (Typ.)<br>( $V_F=0\text{V}$ , $f=1\text{MHz}$ )                 | $C$             | 15          | pF            |

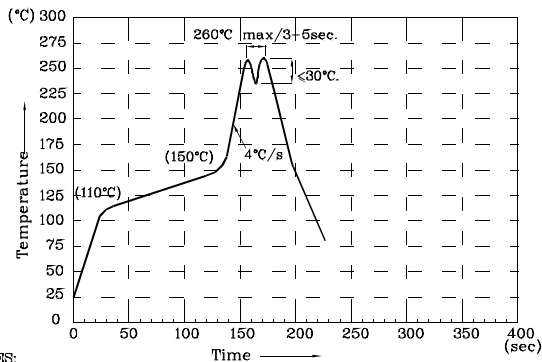
| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Luminous<br>Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |      | Wavelength<br>nm<br>λP | Lens           |
|----------------|-------------------|----------------------|--------------------------------------------------------|------|------------------------|----------------|
|                |                   |                      | min.                                                   | typ. |                        |                |
| XEMG2800D      | Green             | GaP                  | 12                                                     | 26   | 565                    | Green Diffused |



❖ MG



Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C.
5. No more than once.

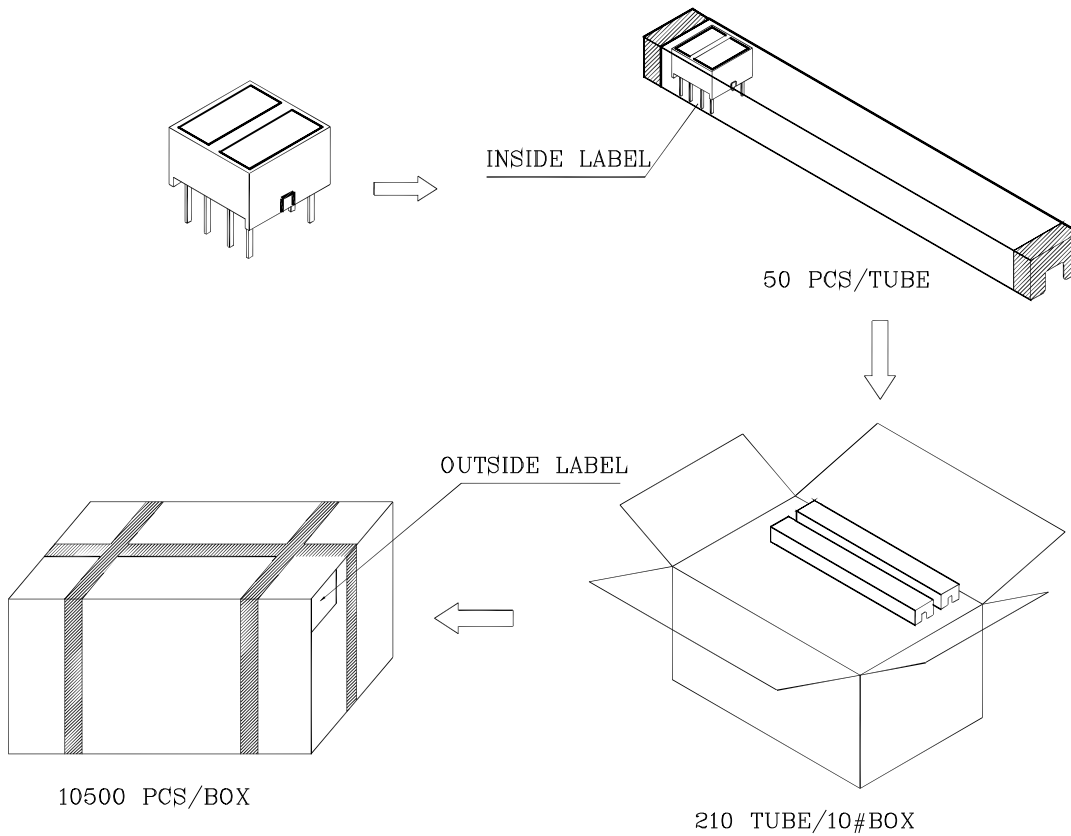
Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous Intensity / Luminous Flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

## PACKING & LABEL SPECIFICATIONS



### Inside Label On IC-tube

|                |                    |               |
|----------------|--------------------|---------------|
| SunLED         | PART NO: XExx2800x | Q.C.          |
| QTY: 50 PCS    | CODE: xx           | PASSED        |
| XXXXXXXX-XXXX  |                    | xx xx xx      |
| LOT NO.        |                    | FQC           |
| RoHS Compliant |                    | Date          |
|                |                    | Number OF FQC |

### Outside Label On Box

|           |          |                |              |
|-----------|----------|----------------|--------------|
| XXXXXX    | Bin Code |                | Number OF QA |
| XExx2800x | XX       | QAx            | Date         |
| 10500 PCS |          | xx xx xx       |              |
|           |          | PASSED         |              |
|           |          | RoHS Compliant |              |