

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

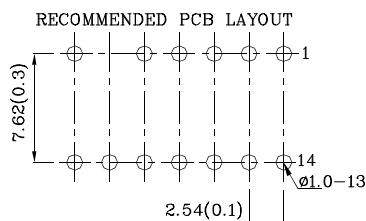
[SunLED](#)  
[XMMR07C](#)

For any questions, you can email us directly:

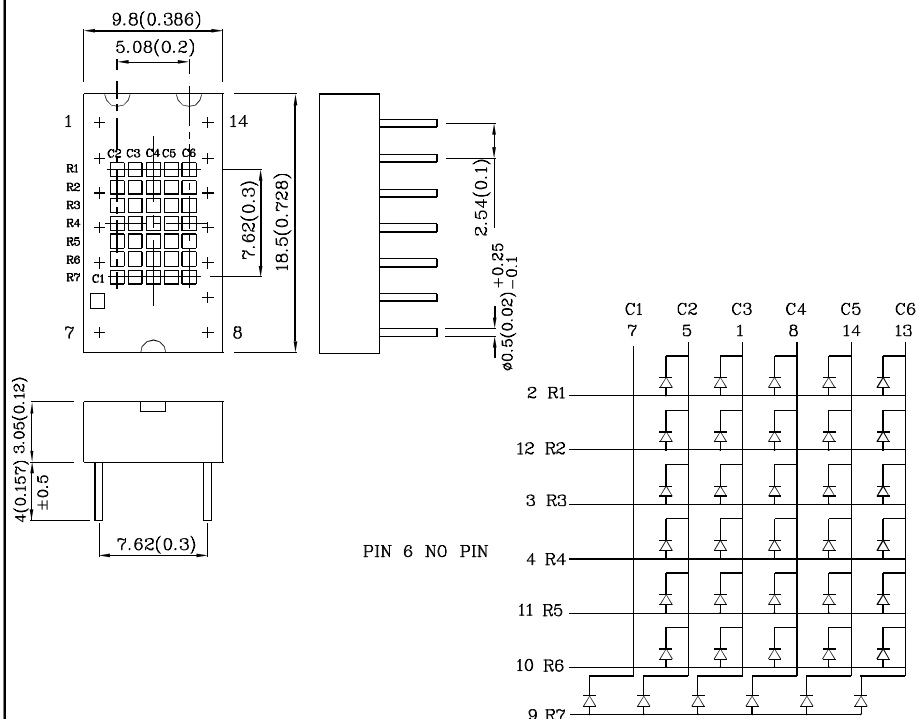
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

## Features

- Low power consumption
- Robust package
- I.C. Compatible
- Optional black face provides superior color contrast
- RoHS Compliant



## 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)             |                       | MR<br>(GaAlAs) | Unit |
|--|-----------------------|----------------|------|
| Reverse Voltage  | V <sub>R</sub>        | 5              | V    |
| Forward Current  | I <sub>F</sub>        | 30             | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>       | 155            | mA   |
| Power Dissipation  | P <sub>D</sub>        | 75             | 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 |                |      |

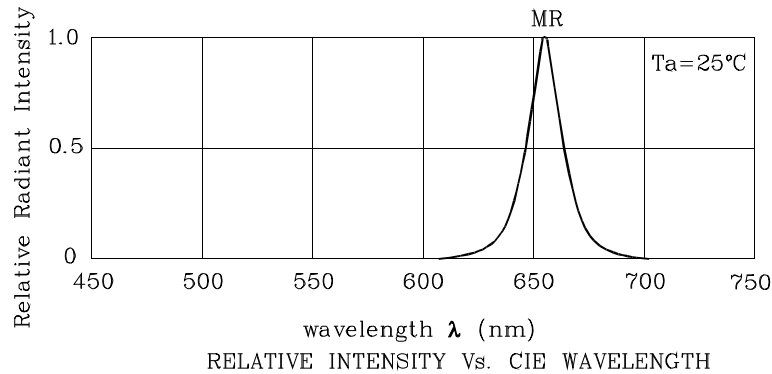
| Operating Characteristics<br>( $T_A=25^\circ\text{C}$ )                         |                 | MR<br>(GaAlAs) | Unit          |
|---|-----------------|----------------|---------------|
| Forward Voltage (Typ.)<br>( $I_F=10\text{mA}$ )                                 | $V_F$           | 1.8            | V             |
| Forward Voltage (Max.)<br>( $I_F=10\text{mA}$ )                                 | $V_F$           | 2.5            | V             |
| Reverse Current (Max.)<br>( $V_R=5\text{V}$ )                                   | $I_R$           | 10             | $\mu\text{A}$ |
| Wavelength of Peak<br>Emission CIE127-2007* (Typ.)<br>( $I_F=10\text{mA}$ )     | $\lambda_P$     | 655*           | nm            |
| Wavelength of Dominant<br>Emission CIE127-2007* (Typ.)<br>( $I_F=10\text{mA}$ ) | $\lambda_D$     | 640*           | nm            |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>( $I_F=10\text{mA}$ )     | $\Delta\lambda$ | 20             | nm            |
| Capacitance (Typ.)<br>( $V_F=0\text{V}$ , $f=1\text{MHz}$ )                     | $C$             | 45             | pF            |

| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Luminous Intensity<br>CIE127-2007*<br>( $I_F=10\text{mA}$ ) ucd | Wavelength<br>CIE127-2007*<br>nm $\lambda_P$ | Description            |
|----------------|-------------------|----------------------|---|--|------------------------|
|                |                   |                      | min.  | typ.   |                        |
| XMMR07C        | Red               | GaAlAs               | 14000<br>3600*  | 29990<br>7490*                               | 655*<br>Column Cathode |

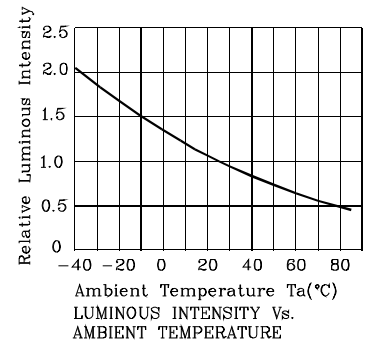
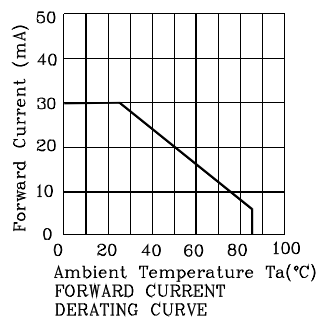
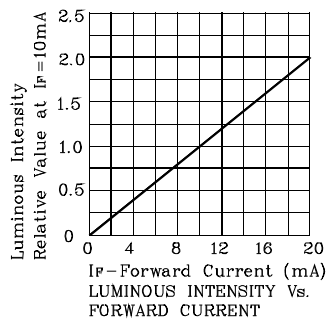
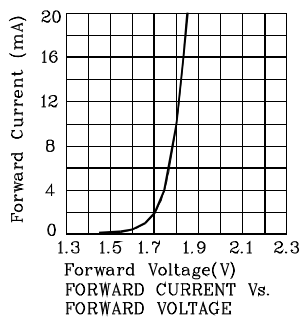
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Mar 03,2014

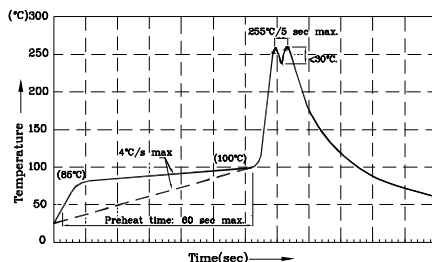
XDSA1808 V7-X Layout: Maggie L.



❖ MR



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



- Notes:
1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 250°C
  2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
  3. Do not apply stress to the epoxy resin while the temperature is above 85°C.
  4. Fixtures should not incur stress on the component when mounting and during soldering process.
  5. SAC 305 solder alloy is recommended.
  6. No more than one wave soldering pass.

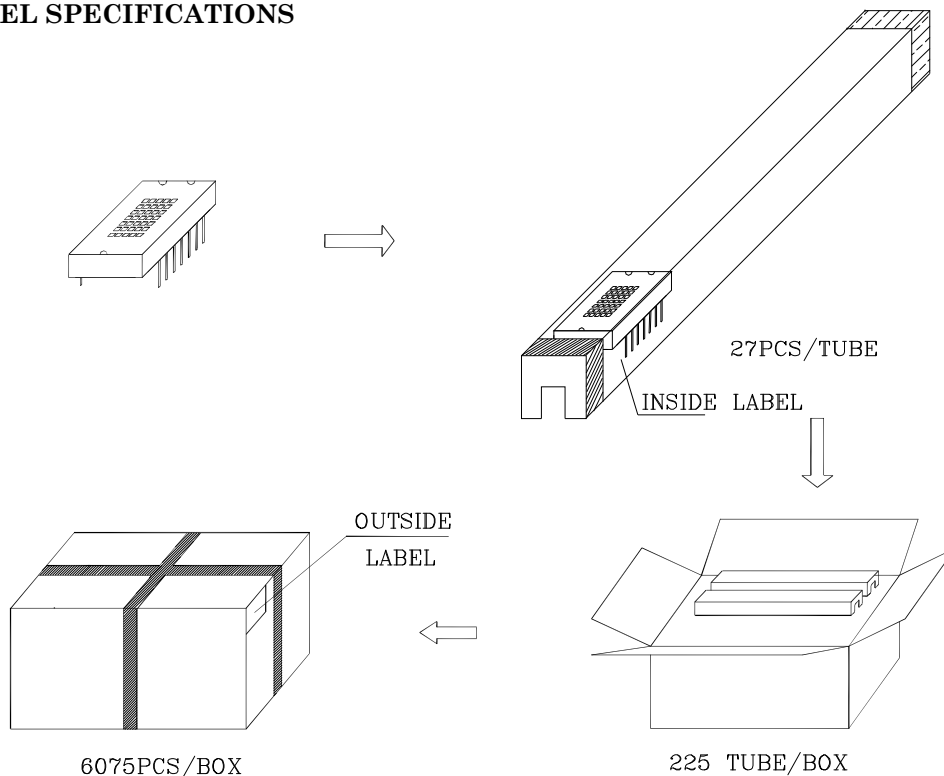
Remarks:

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:

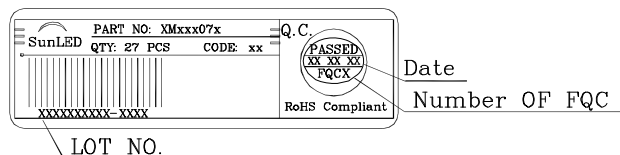
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

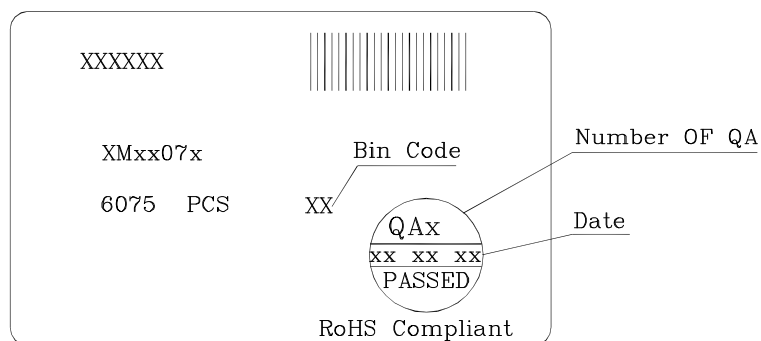
## PACKING & LABEL SPECIFICATIONS



Inside Label On IC-TUBE



Outside Label On Box



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