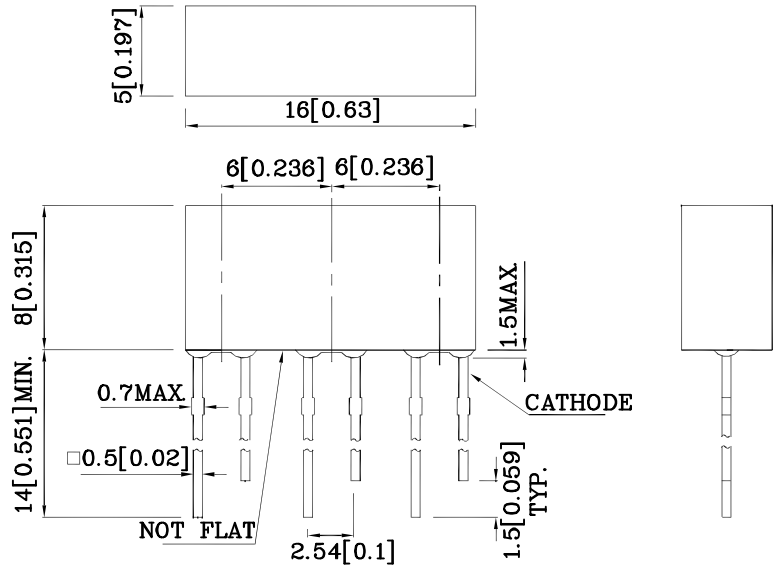


Features

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



Package Schematics



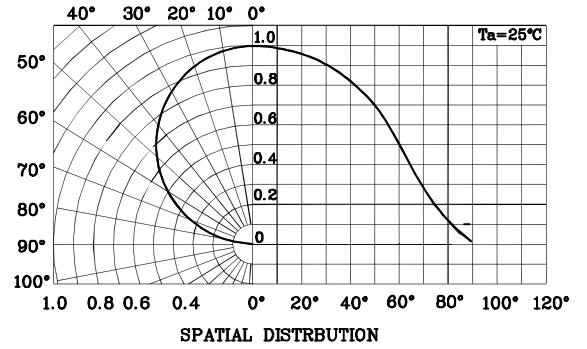
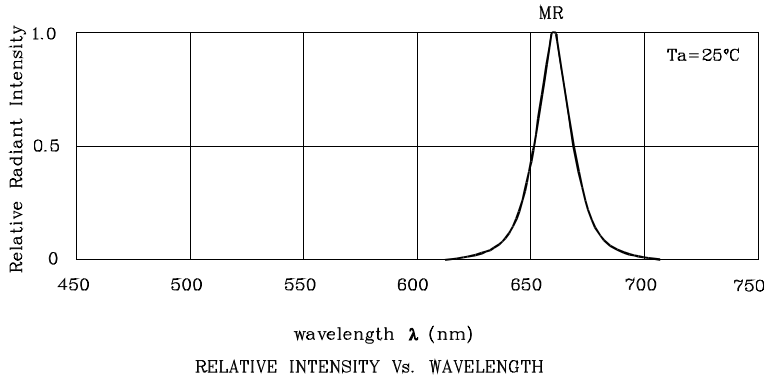
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

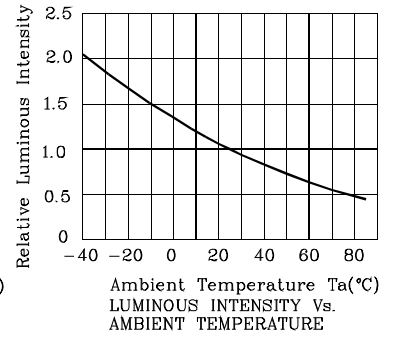
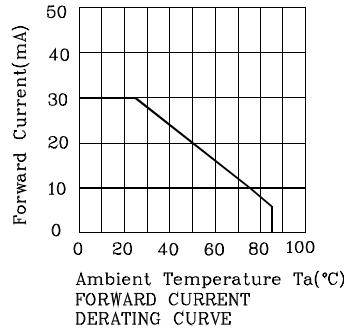
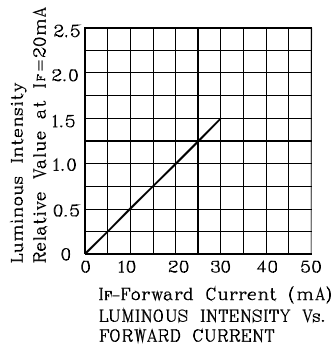
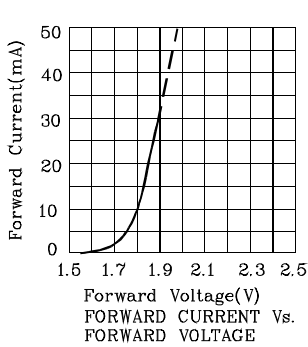
| Absolute Maximum Ratings ($T_A=25^\circ\text{C}$) | | MR (GaAlAs) | Unit |
|--|---------------------|----------------|------|
| Reverse Voltage | V_R | 5 | V |
| Forward Current | I_F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i_{FS} | 155 | mA |
| Power Dissipation | P_D | 75 | mW |
| Operating Temperature | T_A | -40 ~ +85 | °C |
| Storage Temperature | T_{stg} | -40 ~ +85 | |
| Lead Solder Temperature [2mm Below Package Base] | 260°C For 3 Seconds | | |
| Lead Solder Temperature [5mm Below Package Base] | 260°C For 5 Seconds | | |

| Operating Characteristics ($T_A=25^\circ\text{C}$) | | MR (GaAlAs) | Unit |
|---|-----------------|----------------|------|
| Forward Voltage (Typ.) ($I_F=20\text{mA}$) | V_F | 1.85 | V |
| Forward Voltage (Max.) ($I_F=20\text{mA}$) | V_F | 2.5 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$) | I_R | 10 | uA |
| Wavelength of Peak Emission (Typ.) ($I_F=20\text{mA}$) | λ_P | 660 | nm |
| Wavelength of Dominant Emission (Typ.) ($I_F=20\text{mA}$) | λ_D | 640 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$) | $\Delta\lambda$ | 20 | nm |
| Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 45 | pF |

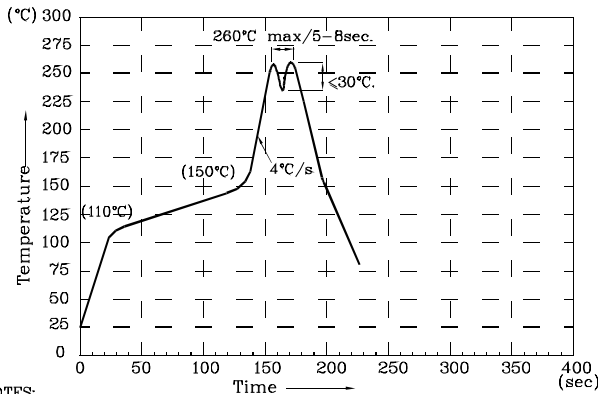
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity ($I_F=20\text{mA}$) mcd | Wavelength nm λ_P | Viewing Angle 2θ 1/2 |
|-------------|----------------|-------------------|--------------|--|---------------------------------|-------------------------|
| | | | | min. | typ. | |
| XEMR23D | Red | GaAlAs | Red Diffused | 30 | 59 | 660 120° |



❖ MR



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:

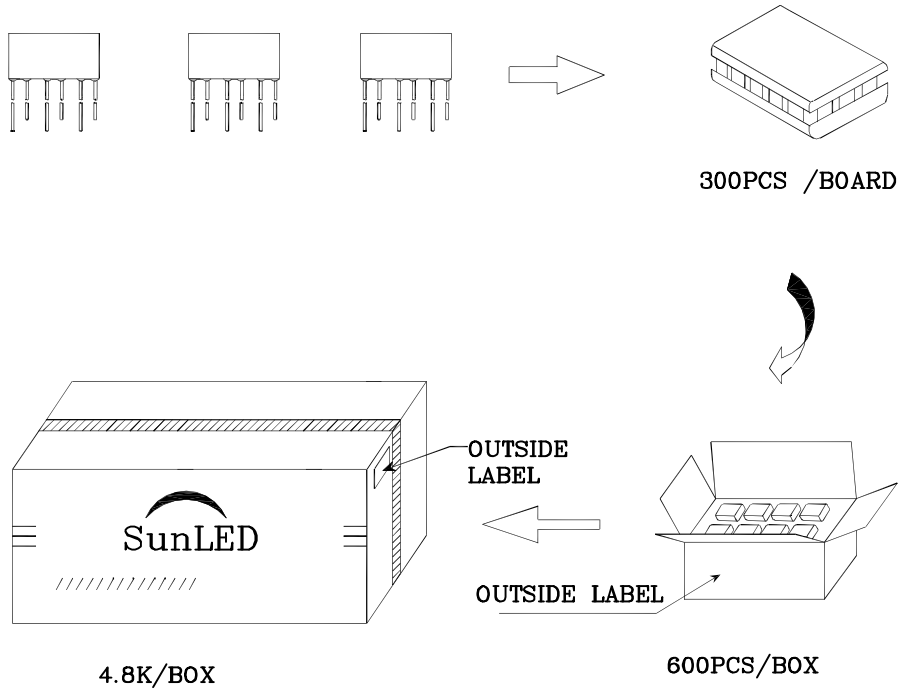
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:



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

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS



| | | | | | | |
|---|--|--|------|-----|------------|--------|
|  | | <table border="1"> <tr><td>Q.C.</td></tr> <tr><td>Q C</td></tr> <tr><td>XX XX XXXX</td></tr> <tr><td>PASSED</td></tr> </table> | Q.C. | Q C | XX XX XXXX | PASSED |
| Q.C. | | | | | | |
| Q C | | | | | | |
| XX XX XXXX | | | | | | |
| PASSED | | | | | | |
| P/NO : XE xx 23 x | | | | | | |
| QTY : 300 pcs | | CODE: XXX | | | | |
| S/N : XX | | | | | | |
| LOT NO: | | | | | | |
|  XXXXXXXXXXXXXXXXXXXXX | | | | | | |
| RoHS Compliant | | | | | | |