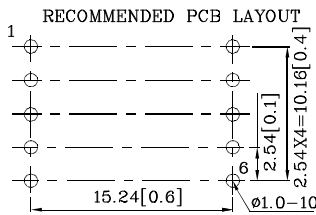
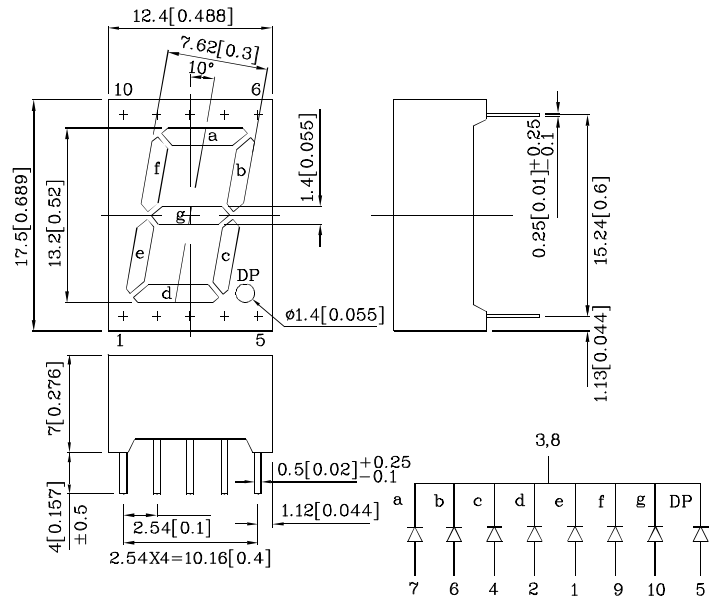


Features

- Low power consumption
- Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- Optional black face provides superior color contrast
- RoHS Compliant



Package Schematics



Notes:

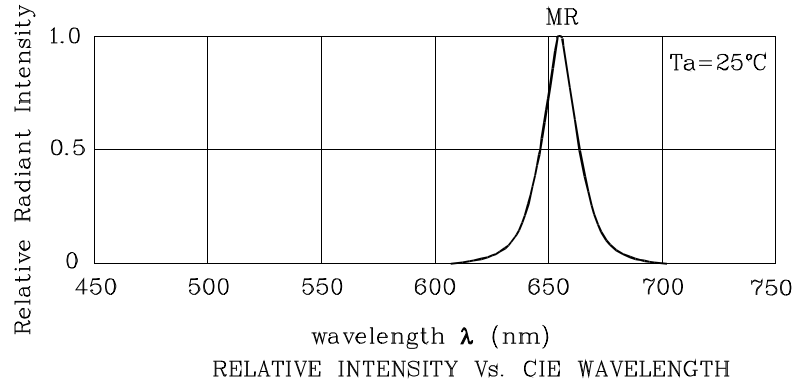
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
2. Specifications are subject to change without notice.

| Absolute Maximum Ratings ($T_A=25^\circ\text{C}$) | | 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 3-5 Seconds | | |

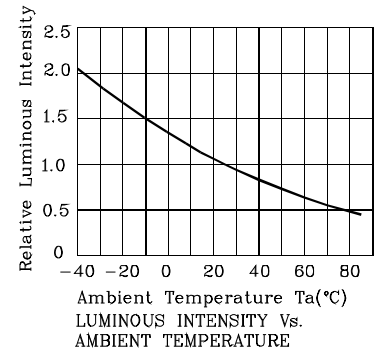
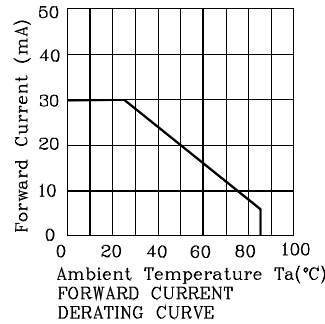
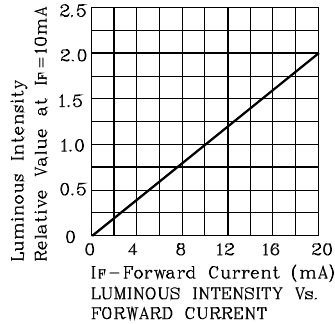
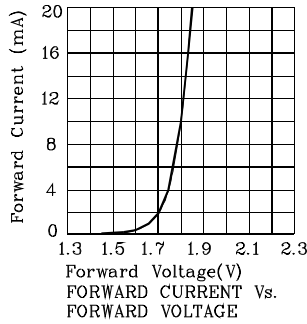
| Operating Characteristics ($T_A=25^\circ\text{C}$) | | MR (GaAlAs) | Unit |
|---|-----------------|----------------|---------------|
| Forward Voltage (Typ.) ($I_F=10\text{mA}$) | V_F | 1.8 | V |
| Forward Voltage (Max.) ($I_F=10\text{mA}$) | V_F | 2.5 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$)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

| Part Number | Emitting Color | Emitting Material | Luminous Intensity CIE127-2007* ($I_F=10\text{mA}$) ucd | | Wavelength CIE127-2007* nm λ_P | Description |
|-------------|----------------|-------------------|--|----------------|---|-------------------------------------|
| | | | min. | typ. | | |
| XDMR13C | Red | GaAlAs | 21000 5600* | 33990 9990* | 655* | Common Cathode, Rt.Hand Decimal. |

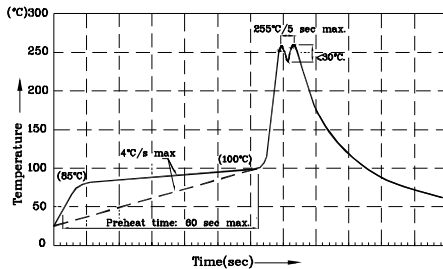
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ 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 260°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.

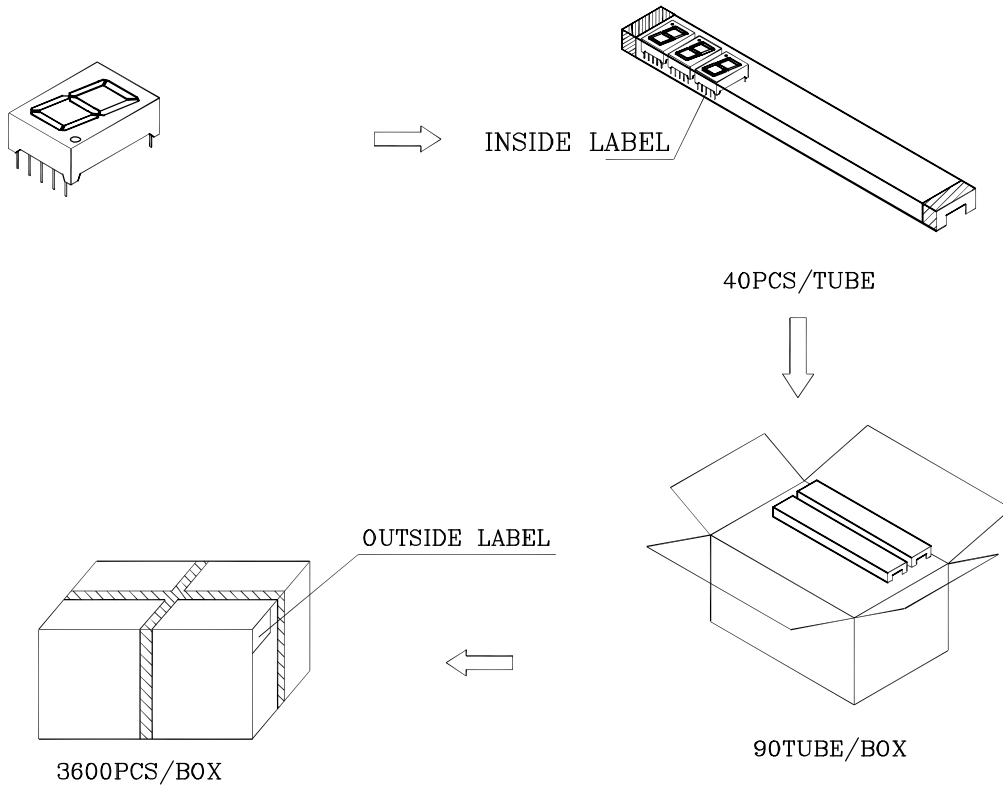
Remarks:

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:

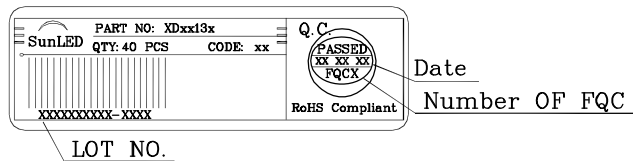
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

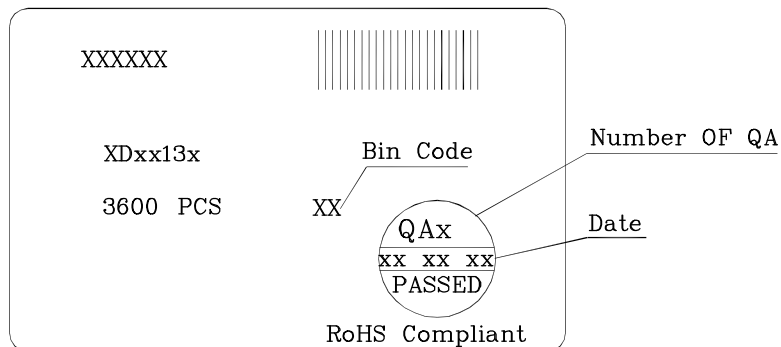
PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube



Outside Label On Box



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