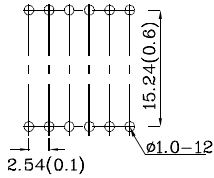


**Features**

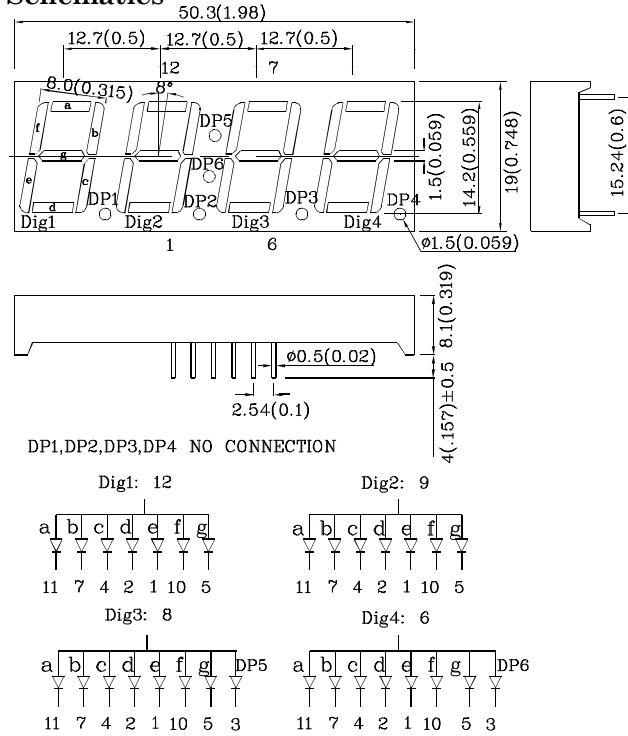
- Low power consumption
- Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- Optional black face provides superior color contrast
- RoHS Compliant



RECOMMENDED PCB LAYOUT



**Package Schematics**



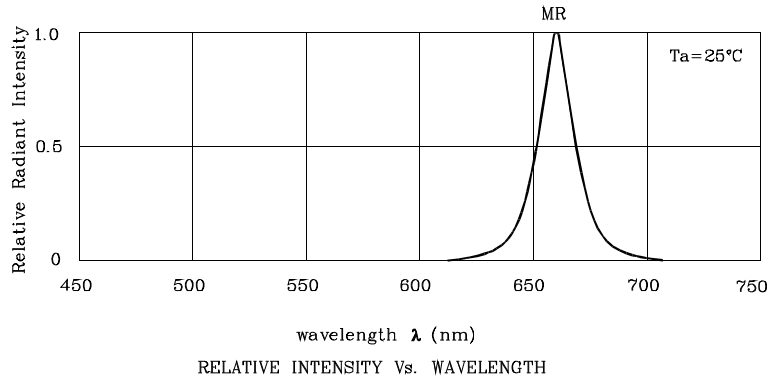
Notes:

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

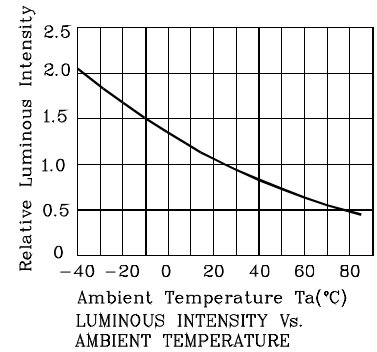
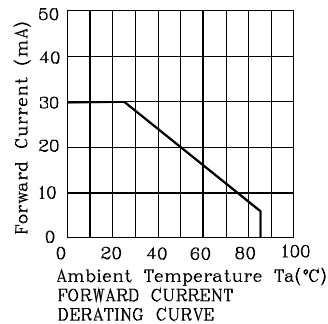
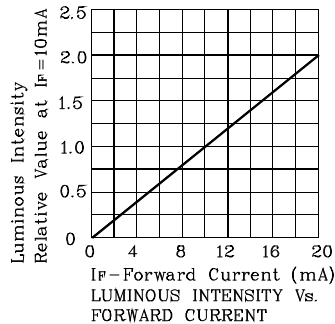
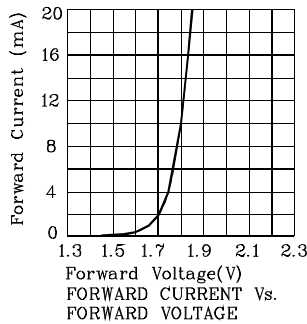
| Absolute Maximum Ratings (T <sub>A</sub> =25°C)                |                       | MR (GaAlAs) | Unit |
|--|-----------------------|-------------|------|
| Reverse Voltage  | V <sub>R</sub>        | 5           | V    |
| Forward Current  | I <sub>F</sub>        | 30          | mA   |
| Forward 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 (T <sub>A</sub> =25°C)                          |                | MR (GaAlAs) | Unit |
|---|----------------|-------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =10mA)                          | V <sub>F</sub> | 1.8         | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =10mA)                          | V <sub>F</sub> | 2.5         | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                            | I <sub>R</sub> | 10          | uA   |
| Wavelength of Peak Emission (Typ.)<br>(I <sub>F</sub> =10mA)              | λ <sub>P</sub> | 660         | nm   |
| Wavelength of Dominant Emission (Typ.)<br>(I <sub>F</sub> =10mA)          | λ <sub>D</sub> | 640         | nm   |
| Spectral Line Full Width At Half-Maximum (Typ.)<br>(I <sub>F</sub> =10mA) | Δλ             | 20          | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                        | C              | 45          | pF   |

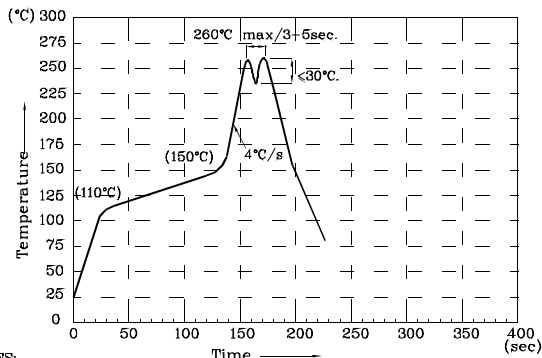
| Part Number | Emitting Color | Emitting Material | Luminous Intensity (I <sub>F</sub> =10mA)<br>ucd |       | Wavelength<br>nm<br>λ <sub>P</sub> | Description  |
|-------------|----------------|-------------------|--|-------|------------------------------------|--------------|
|             |                |                   | min.   | typ.  |                                    |              |
| XDMR14A4-1A | Red            | GaAlAs            | 14000  | 39990 | 660                                | Common Anode |



❖ 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.

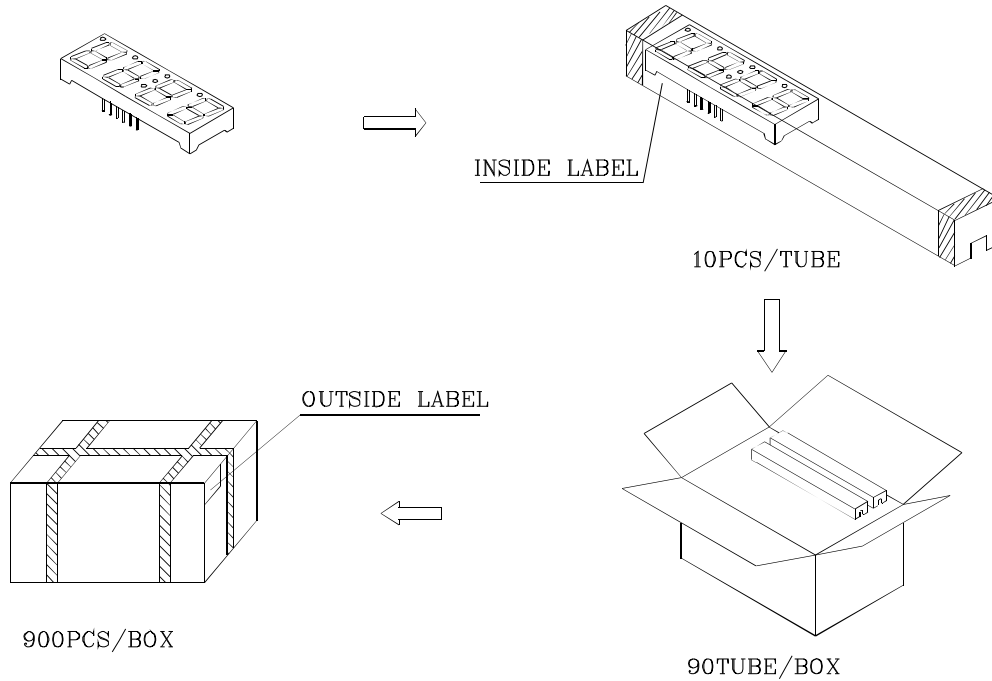
Remarks:

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:

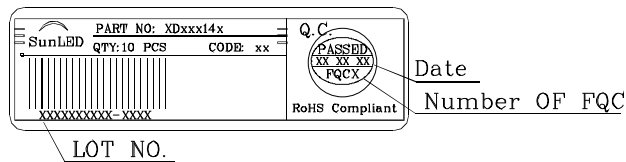
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube



Outside Label On Box

