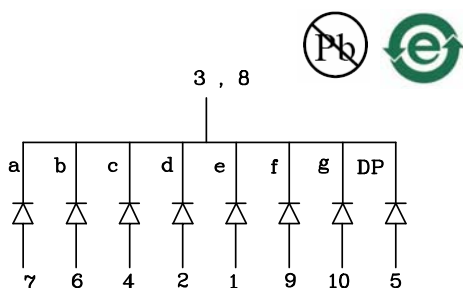


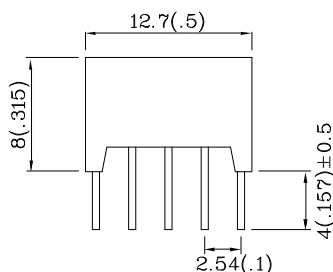
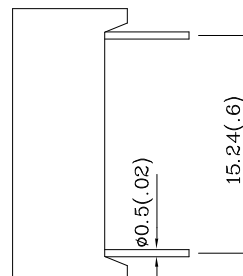
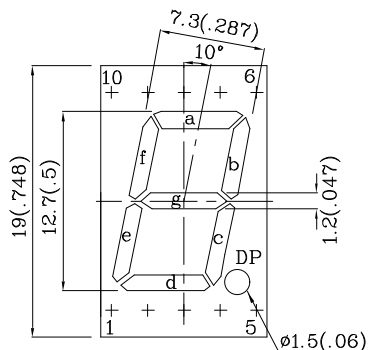
## Features

- 0.5 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.



Notes:

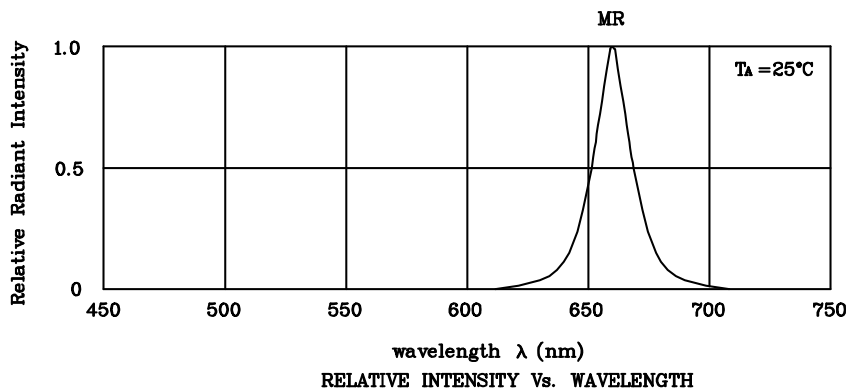
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.



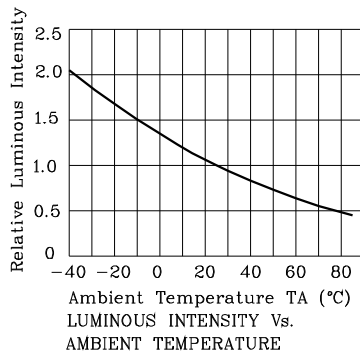
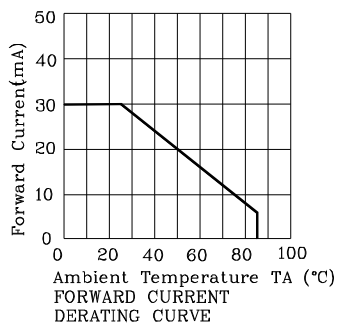
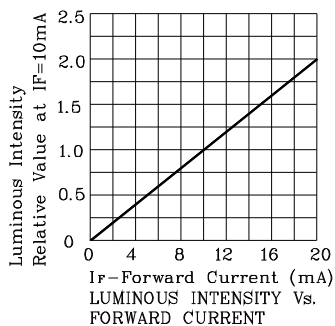
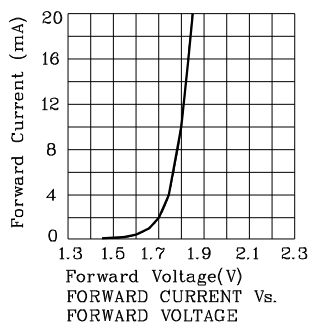
| Absolute Maximum Ratings<br>(TA=25°C)                         |                       | MR<br>(GaAlAs) | Unit |
|---------------------------------------------------------------|-----------------------|----------------|------|
| Reverse Voltage                                               | VR                    | 5              | V    |
| Forward Current                                               | IF                    | 30             | mA   |
| Forward Current (peak)<br>1/10Duty Cycle<br>0.1ms Pulse Width | iFS                   | 155            | mA   |
| Power Dissipation                                             | PT                    | 75             | mW   |
| Operating Temperature                                         | TA                    | -40 ~ +85      | °C   |
| Storage Temperature                                           | Tstg                  | -40 ~ +85      |      |
| Lead Solder Temperature<br>[2mm below package base]           | 260°C For 3~5 Seconds |                |      |

| Operating Characteristics<br>(TA=25°C)                                    |                | MR<br>(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   |

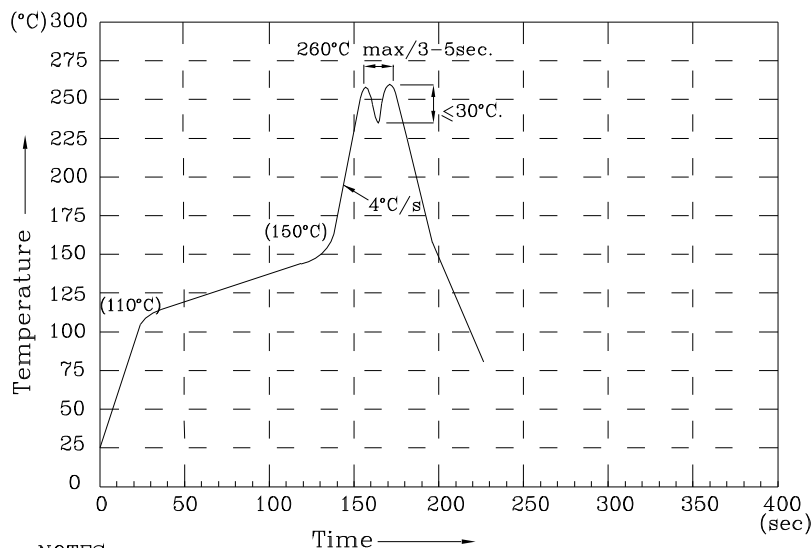
| Part Number                                                                                       | Emitting Color | Emitting Material | Luminous Intensity<br>(I <sub>F</sub> =10mA)<br>ucd | Wavelength<br>nm<br>λ <sub>P</sub> | Description                        |
|---------------------------------------------------------------------------------------------------|----------------|-------------------|-----------------------------------------------------|------------------------------------|------------------------------------|
|                                                                                                   |                |                   | min.                                                | typ.                               |                                    |
| DMR12C                                                                                            | Red            | GaAlAs            | 8000                                                | 29490                              | 660 Common Cathode,Rt.Hand Decimal |
| Published Date : MAR 05,2008      Drawing No : SDSA2068      V3      Checked : B.L.LIU      P.1/4 |                |                   |                                                     |                                    |                                    |



❖ **MR**



### Wave Soldering Profile For Lead-free Through-hole LED.



#### 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 degree°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

#### Remarks:

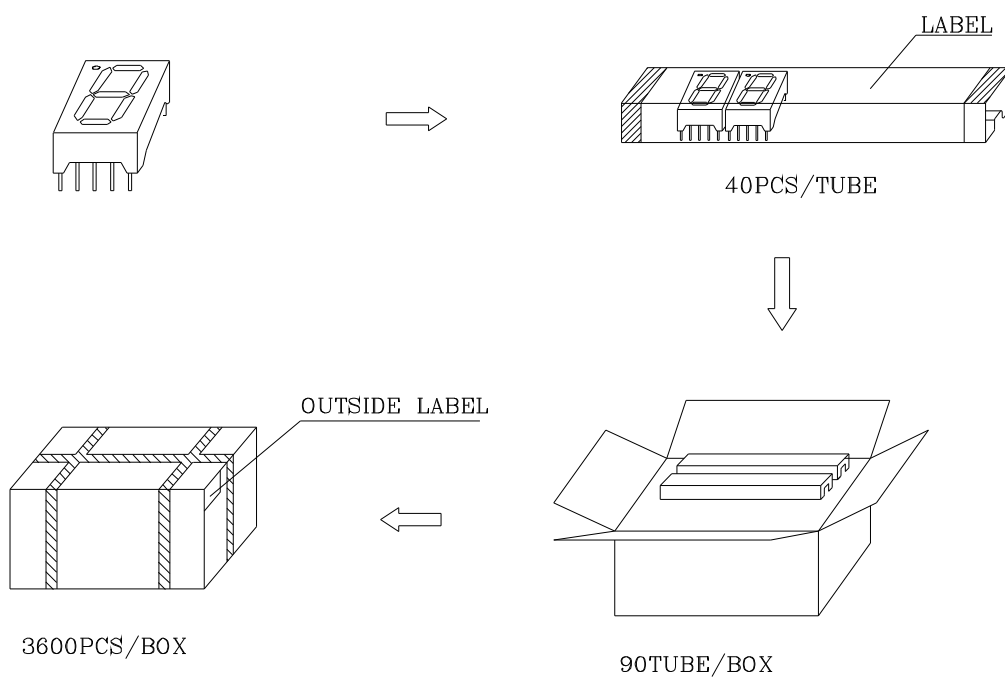
If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

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

## DMR12C



Inside LABEL Paste On The IC-tube

|                 |                 |             |          |                                 |
|-----------------|-----------------|-------------|----------|---------------------------------|
| SunLED          | PART NO: Dxx12x | QTY: 40 PCS | CODE: xx | Q.C. PASSED<br>XX XX XX<br>FQCX |
| XXXXXXXXXX-XXXX |                 |             |          | Lotis Compliant                 |
| LOT NO.         |                 |             |          | Date<br>Number OF FQC           |

Outside LABEL Paste On The Box

|            |      |      |              |
|------------|------|------|--------------|
| BOX Number | XXXX | XXXX | BIN CODE     |
| Dxx12x     | 3600 | XX   | Number OF QA |
|            |      |      | Date         |