

RoHS
Compliant

Specifications

| | |
|---------------------|----------------|
| Dice material | : AlGaInP/GaAs |
| Emmiting Colour | : Hyper Red |
| Lens colour | : Water clear |
| Viewing angle | : 140° |
| Dominant Wavelength | : 628nm |
| Luminous Intensity | : 290mcd |

Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Rating | Unit |
|--|-----------|---|------|
| Power Dissipation | PD | 85 | mW |
| Forward current | If | 25 | mA |
| Reverse Voltage | Vr | 5 | V |
| Peak Pulsing Current | Ifp | 100 | mA |
| Operating Temperature | Top | -40 to +85 | °C |
| Storage Temperature | Tstg. | -40 to +100 | °C |
| Peak Current (1/10Duty Cycle,0.1ms Pulse Width.) | If (peak) | 100 | mA |
| Lead Soldering Temperature. (1.6mm from seating plane) | Tsol. | Reflow Soldering : 260°C for 3 sec. Hand Soldering: 350°C for 3 sec. | |
| Electrostatic Discharge | ESD | 2000 | V |

Electrical and Optical Characteristics

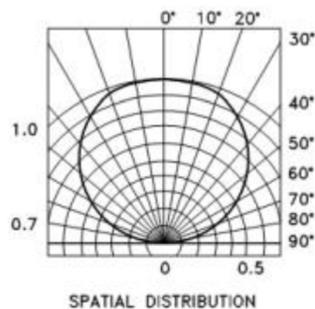
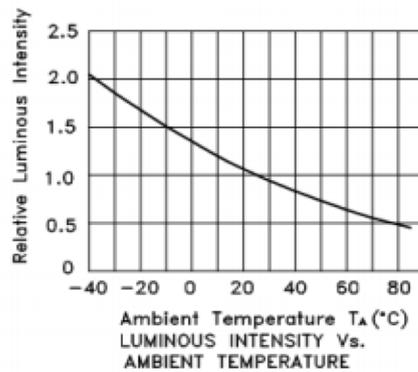
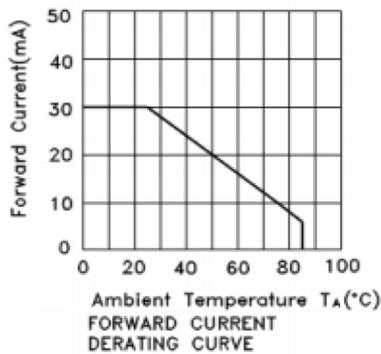
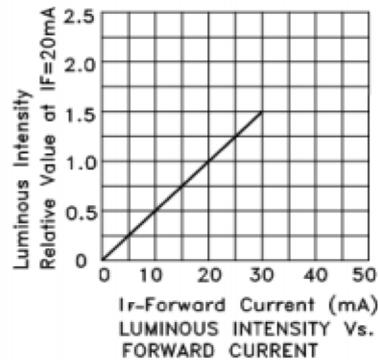
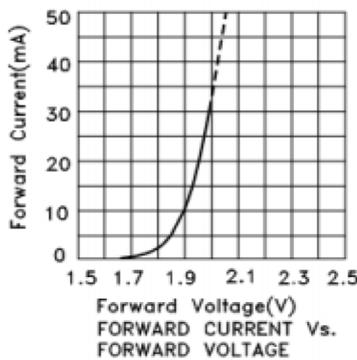
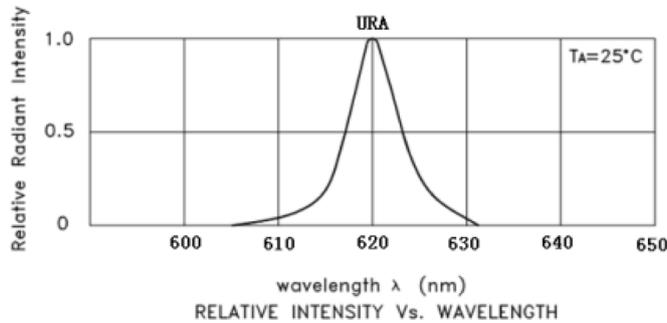
| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-------------------------|--------|-----------|------|------|------|------|
| Luminous Intensity | Iv | If=20mA | 200 | | 290 | mcd |
| Forward Voltage | Vf | If=20mA | 1.8 | | 2.4 | V |
| Dominant Wavelength | λd | If=20mA | 618 | | 628 | nm |
| Reverse Current | Ir | Vr=5V | | | 5 | μA |
| Viewing Angle | 2θ1/2 | If=20mA | | 140 | | deg |
| Spectrum Line Halfwidth | Δλ | If=20mA | | 15 | | nm |

Notes:

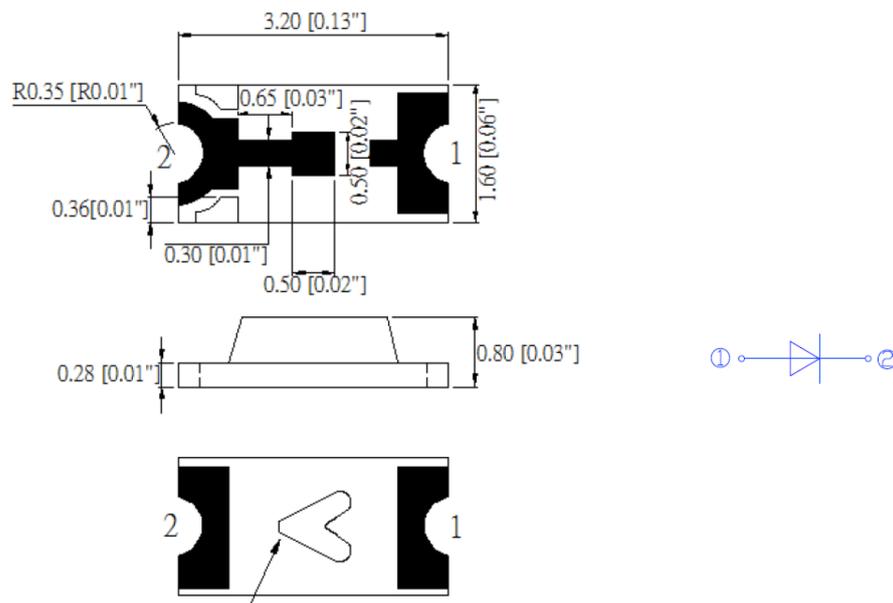
1. Tolerance of Luminous Intensity is ±15%
2. Tolerance of Forward Voltage is ±0.1V
3. Tolerance of Dominant Wavelength is ±1nm

Typical Electrical/Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Dimensions



Tolerance is ± 0.1 mm unless otherwise noted.

Dimensions : Millimetres

Precautions in use:

Storage

It is recommended to store the products in the following conditions:

1. Do not open the moisture proof bag before ready to use the LEDs
2. The LEDs should be kept at 30°C or less and 60%RH or less before opening the package. The max. storage period before opening the package is 1 year.
3. After opening the package, the LEDs should be kept at 30°C/40%RH or less, and it should be used within 7 days
4. If the LEDs require baking, bake at: 60 \pm 5oC for 24 hours

Hand Soldering

The temperature of the iron should be lower than 300oC and soldering within 3sec per solder-pad is to be observed.

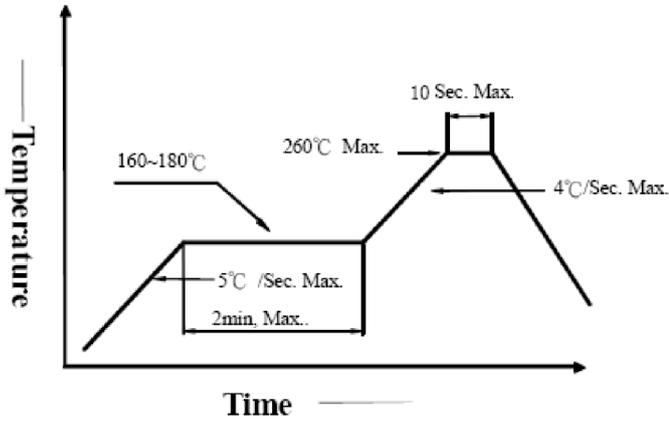
Avoid using organic solvent.

Recommend ultrasonic method 300W Max.

Cleaning

Surface condition of this device may change when organic solvents such as trichloroethylene or acetone are applied.

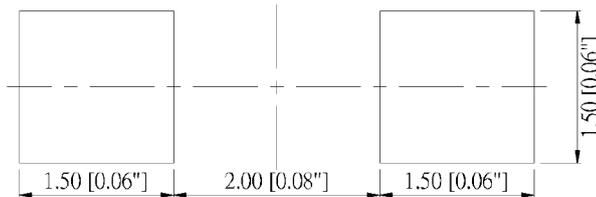
Reflow Temp/Time



Notes:

1. Reflow soldering should not be done more than two times.
2. Do not put stress on the LEDs when soldering.

Reflow Soldering Pad Dimensions



Part Number Table

| Description | Part Number |
|---|-------------|
| Chip LED, Hyper Red, 628nm, 140°, 290mcd, Surface Mount | MP008256 |

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