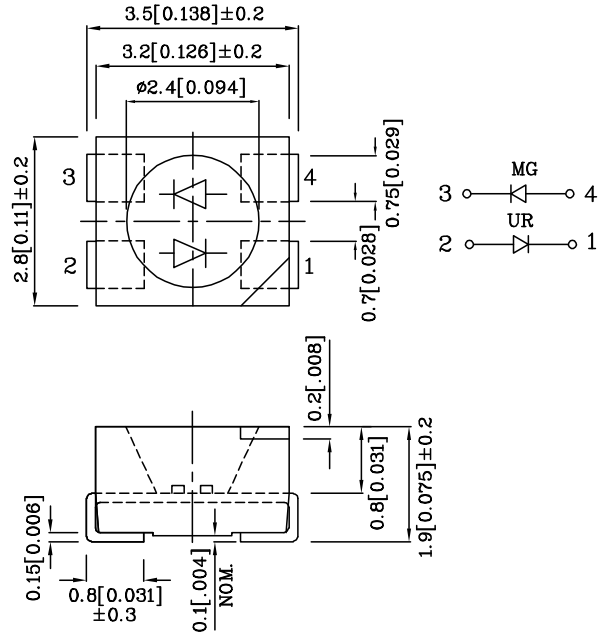


### Features

- BOTH CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1500PCS / REEL.
- RoHS COMPLIANT.

### Notes:

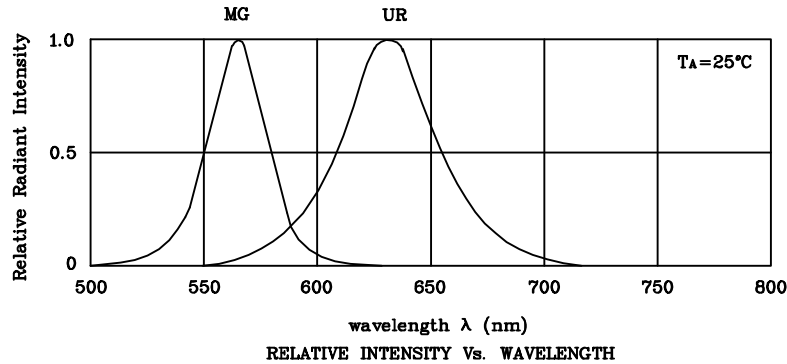
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.



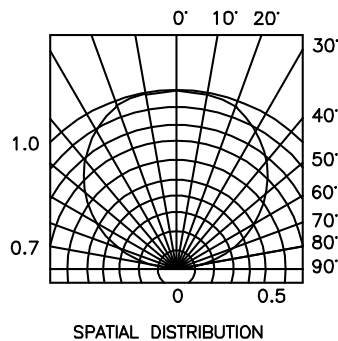
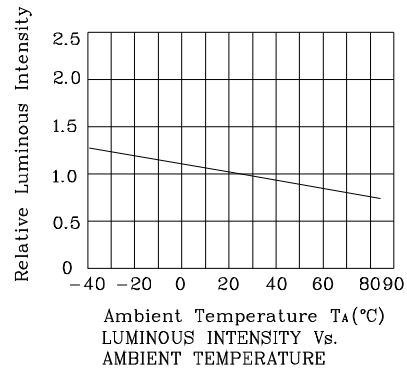
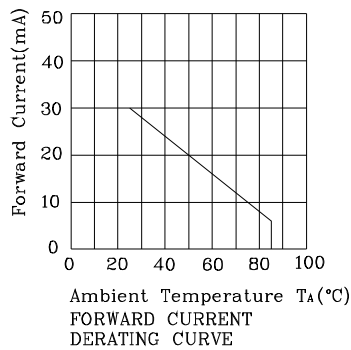
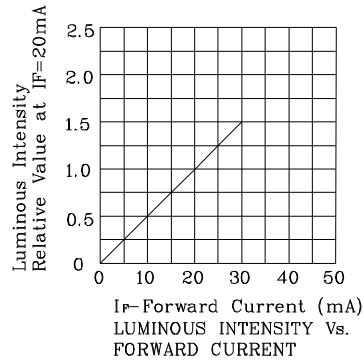
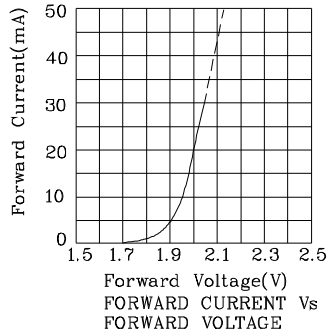
| Absolute maximum ratings<br>(TA=25°C)                         |                  | UR<br>(GaAsP/<br>GaP) | MG<br>(GaP) | Unit |
|---|------------------|-----------------------|-------------|------|
| Reverse voltage   | V <sub>R</sub>   | 5                     | 5           | V    |
| Forward current   | I <sub>F</sub>   | 30                    | 25          | mA   |
| Forward current (peak)<br>1/10Duty cycle<br>0.1ms pulse width | i <sub>FS</sub>  | 160                   | 140         | mA   |
| Power dissipation   | P <sub>T</sub>   | 75                    | 62.5        | mW   |
| Operating temperature   | T <sub>A</sub>   | -40 ~ +85             |             | °C   |
| Storage temperature   | T <sub>stg</sub> | -40 ~ +85             |             |      |

| Operating Characteristics<br>(TA=25°C)                       |                | UR<br>(GaAsP/<br>GaP) | MG<br>(GaP) | Unit |
|--|----------------|-----------------------|-------------|------|
| Forward voltage (typ.)<br>(I <sub>F</sub> =20mA)             | V <sub>F</sub> | 2.0                   | 2.2         | V    |
| Forward voltage (max.)<br>(I <sub>F</sub> =20mA)             | V <sub>F</sub> | 2.5                   | 2.5         | V    |
| Reverse current<br>(V <sub>R</sub> =5V)                      | I <sub>R</sub> | 10                    | 10          | uA   |
| Wavelength at peak<br>emission<br>(I <sub>F</sub> =20mA)     | λ peak         | 627                   | 565         | nm   |
| Wavelength at<br>Dominant emission<br>(I <sub>F</sub> =20mA) | λ D            | 625                   | 568         | nm   |
| Spectral Line half-width<br>(I <sub>F</sub> =20mA)           | Δλ             | 45                    | 30          | nm   |
| Capacitance<br>(V <sub>F</sub> =0V, f=1MHz)                  | C              | 15                    | 15          | pF   |

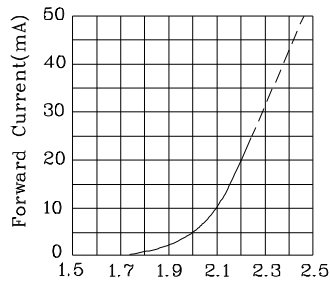
| Part Number | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |      | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------|----------------|-------------------|-------------|---|------|-------------------------|--------------------------|
|             |                |                   |             | min.  | typ. |                         |                          |
| XZURMG45W   | Red            | GaAsP/GaP         | Water Clear | 10  | 29   | 627                     | 120°                     |
|             | Green          | GaP               |             | 10  | 23   |                         |                          |



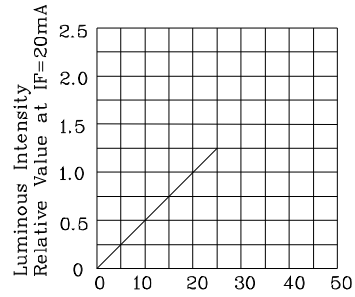
❖ UR



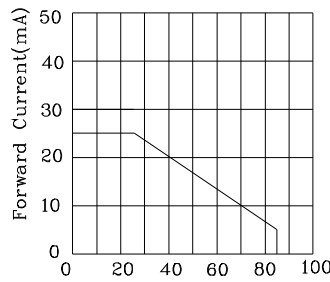
❖ MG



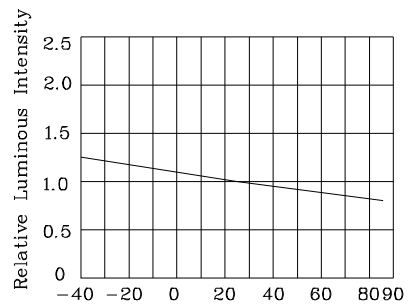
Forward Voltage(V)  
FORWARD CURRENT Vs.  
FORWARD VOLTAGE



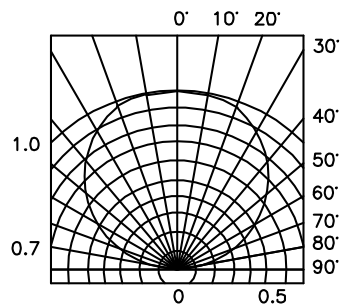
$I_F$ -Forward Current (mA)  
LUMINOUS INTENSITY Vs.  
FORWARD CURRENT



Ambient Temperature  $T_A$  (°C)  
FORWARD CURRENT  
DERATING CURVE

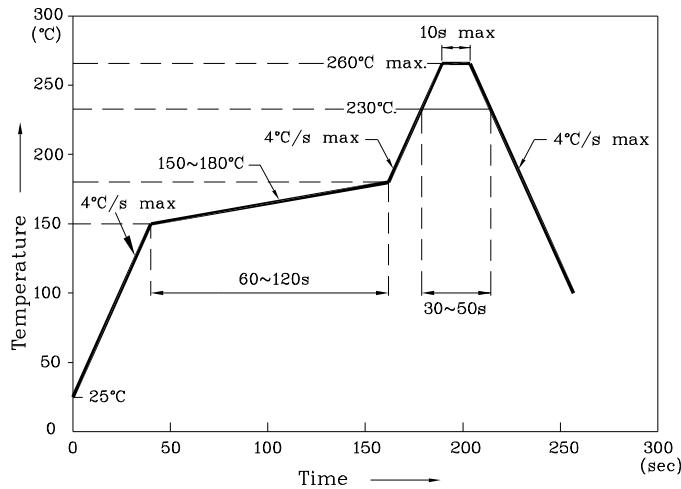


Ambient Temperature  $T_A$  (°C)  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

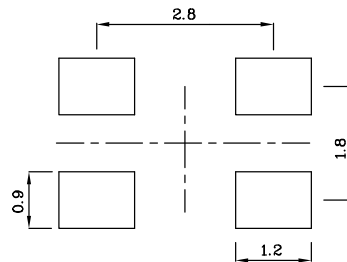
Reflow Soldering Profile For Lead-free SMT Process.



Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)

