

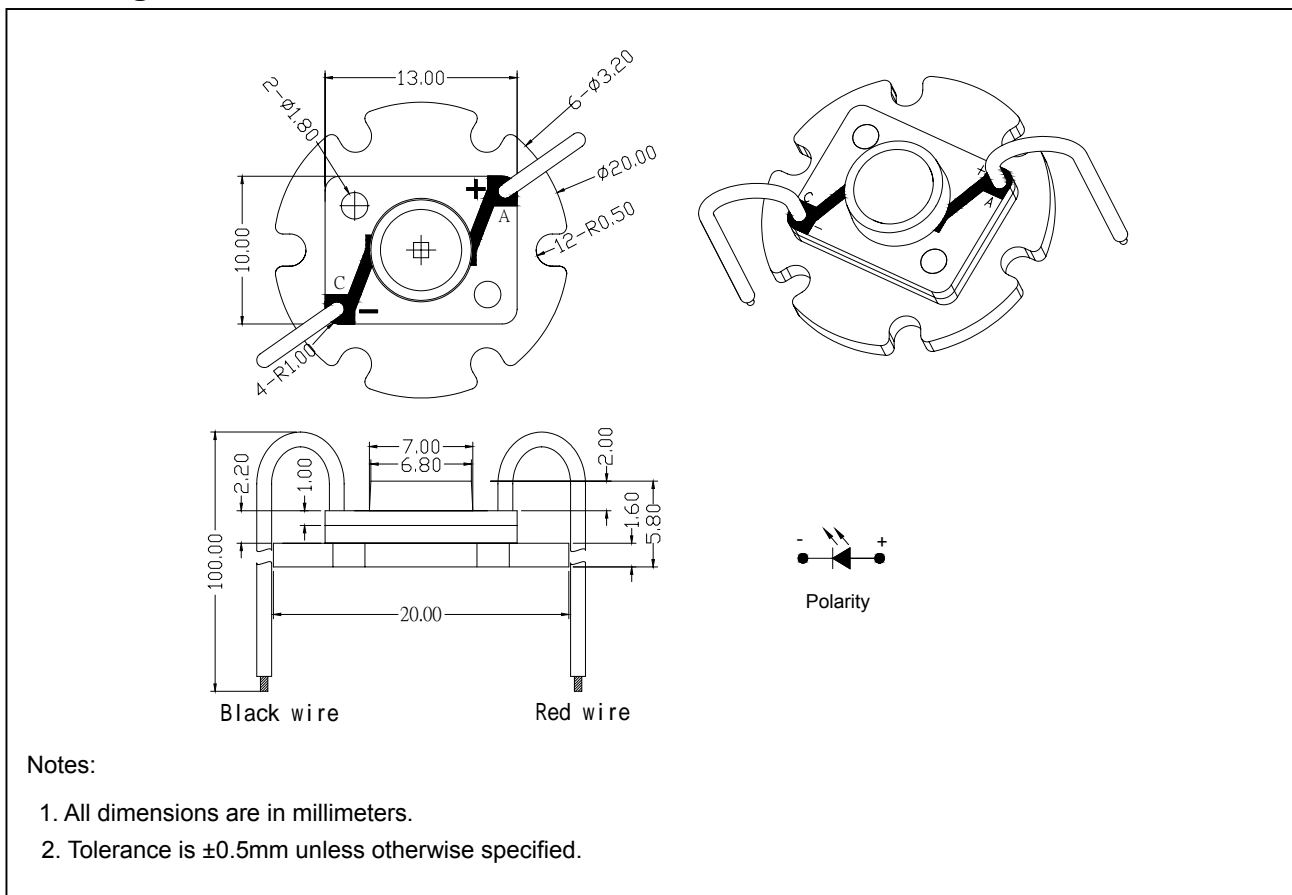
### ● Features:

1. Input power: 1W.
2. Chip material: AlGaInP.
3. Emitted color: Red.
4. High lumen output.
5. High flux density.
6. Low power consumption.
7. Efficient heat transfer.
8. With heat sink.

### ● Applications:

1. Light engine.
2. Torch.
3. Desk lamp.
4. General lighting.

### ● Package dimensions :



● **Absolute maximum ratings(Ta=25°C)**

| Parameter                                 | Symbol    | Rating  | Unit |
|---|-----------|---------|------|
| Power Dissipation                         | $P_D$     | 1.0     | W    |
| DC Forward Current* <sup>1</sup>          | $I_F$     | 350     | mA   |
| Peak Pulsed Forward Current* <sup>2</sup> | $I_{FP}$  | 1.0     | A    |
| LED Junction Temperature                  | $T_j$     | 130     | °C   |
| Operating Temperature                     | $T_{opr}$ | -30~120 | °C   |
| Storage Temperature                       | $T_{stg}$ | -40~120 | °C   |
| Reverse Voltage                           | $V_R$     | 5       | V    |
| Soldering Temperature (T=5 sec)           | $T_{sol}$ | 300 ± 5 | °C   |

\*<sup>1</sup>Proper current derating must be followed to keep LED junction temperature ( $T_j$ ) below the maximum.

\*<sup>2</sup>Condition for  $I_{FP}$  is pulsed with 1/10 duty and 0.1msec width.

● **Electrical & Optical Characteristics LED (Ta=25°C)**

| Parameter                            | Symbol           | Condition                                    | Min. | Typ. | Max. | Unit          |
|--------------------------------------|------------------|--|------|------|------|---------------|
| Forward Voltage                      | $V_F$            | $I_F = 350\text{mA}$                         | -    | 2.2  | 2.6  | V             |
| Total Flux                           | $\Phi_v$         | $I_F = 350\text{mA}$                         | 20   | 25   | -    | lm            |
| Peak Wavelength                      | $\rho$           | $I_F = 350\text{mA}$                         | -    | 635  | -    | nm            |
| Dominant Wavelength                  | $d$              | $I_F = 350\text{mA}$                         | 620  | -    | 630  | nm            |
| Spectral Line Half-width             | $\Delta \lambda$ | $I_F = 350\text{mA}$                         | -    | 20   | -    | nm            |
| Reverse Current                      | $I_R$            | $V_R = 5\text{V}$                            | -    | -    | 50   | $\mu\text{A}$ |
| Thermal Resistance, Junction To Case | $R_{j-c}$        | $T_J = 25^\circ\text{C}, I_F = 350\text{mA}$ | -    | 15   | -    | °C/W          |
| Viewing Angle                        | $2\theta_{1/2}$  | $I_F = 350\text{mA}$                         | -    | 120  | -    | degree        |

### ● Typical electro-optical characteristics curves

Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

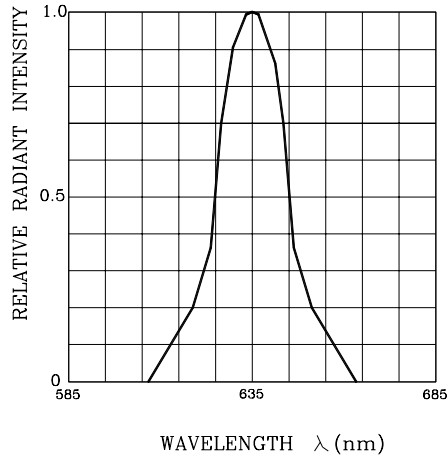


Fig.2 FORWARD CURRENT DERATING CURVE

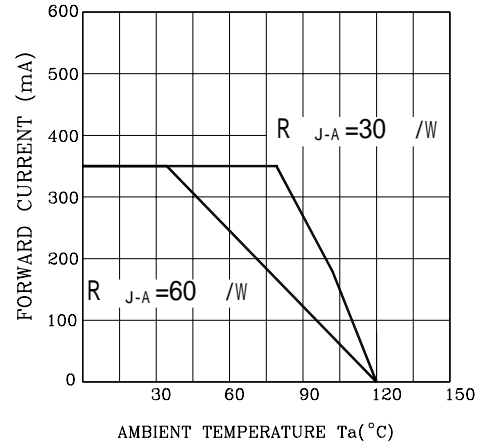


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE

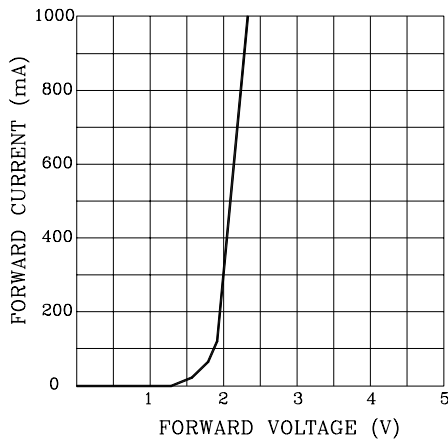


Fig.4 RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

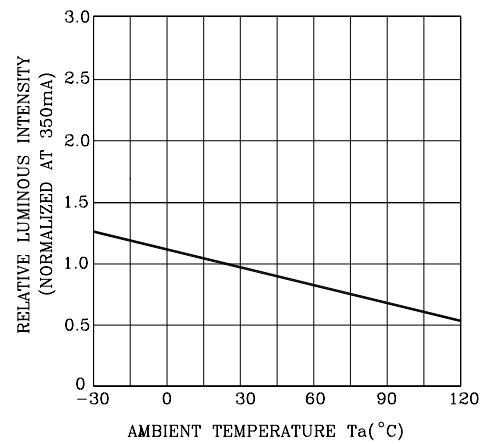


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

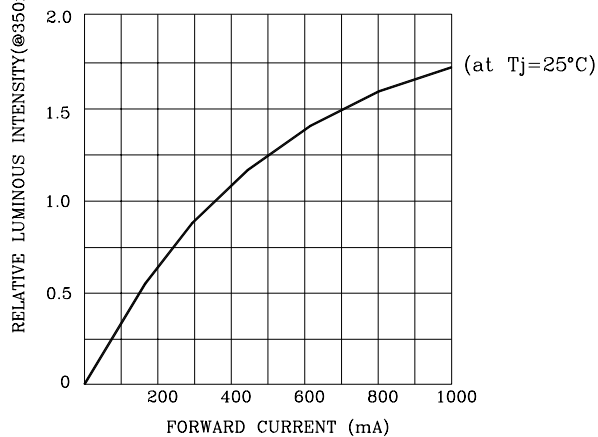
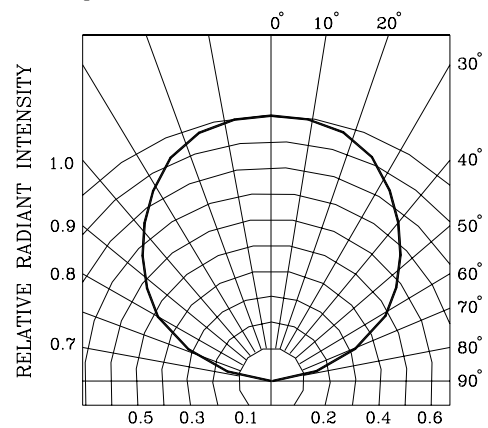
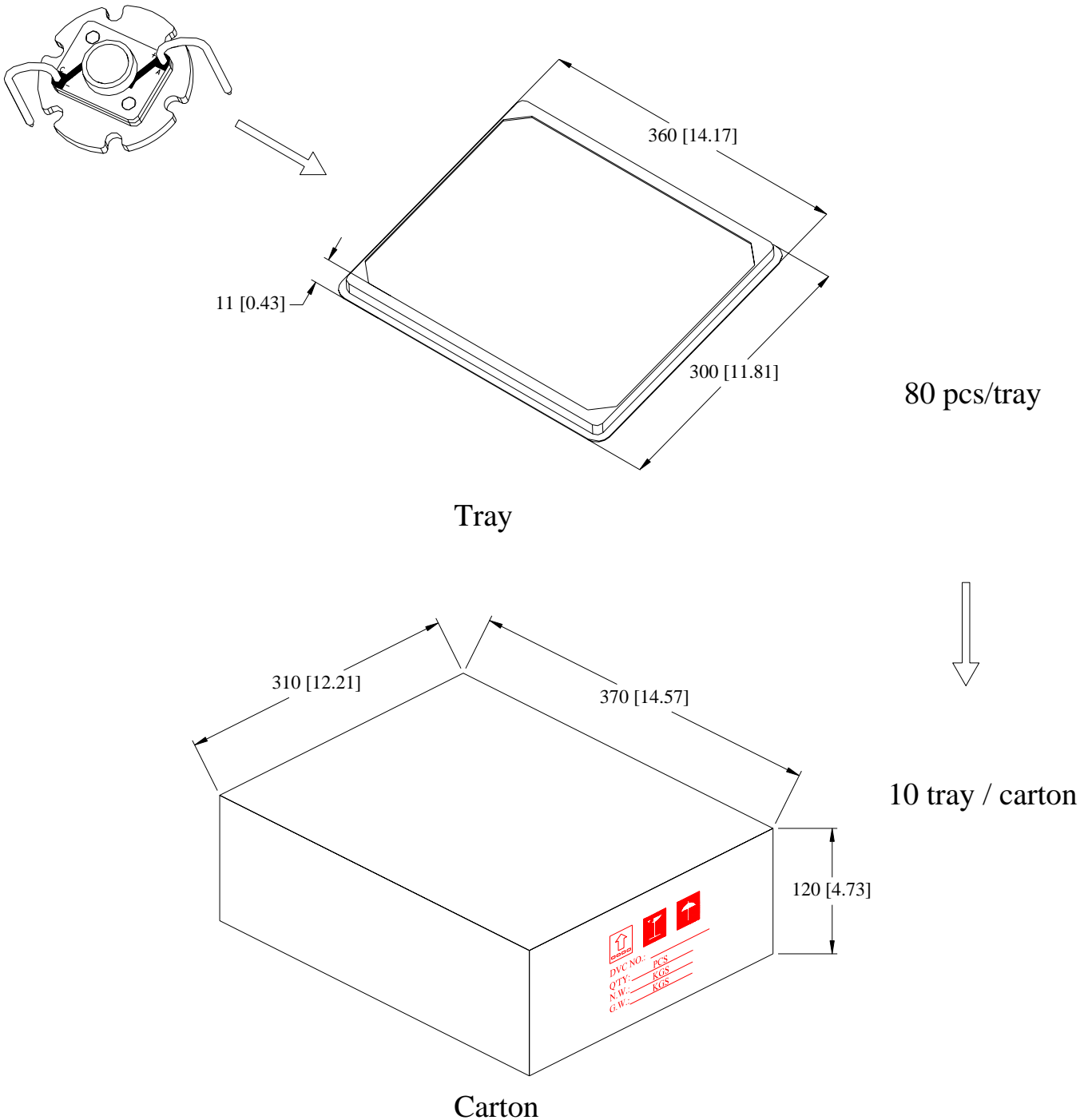


Fig.6 RADIATION DIAGRAM



● Package Method : (unit:mm)



NOTES : Tray : Tolerance is  $\pm 5$  mm unless otherwise noted.

Carton : Tolerance is  $\pm 10$  mm unless otherwise noted.