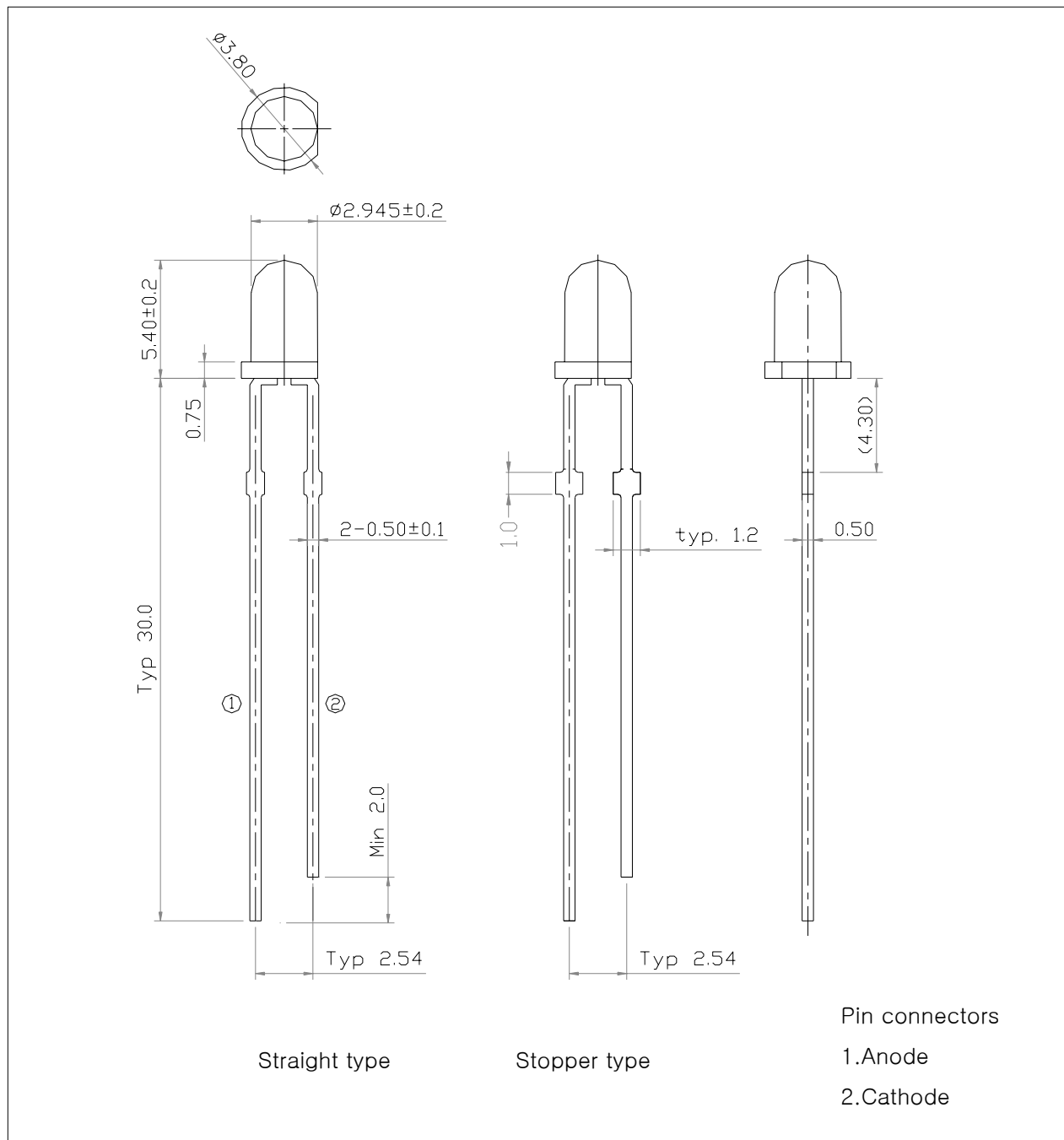


■ Features

- Colorless transparency lens type
- $\phi 3\text{mm(T-1)}$ all plastic mold type
- High luminosity

■ Outline dimensions

(unit : mm)



■ Absolute maximum ratings

| Characteristic | Symbol | Ratings | Unit |
|--------------------------------------|-----------|---------------------|------|
| Power dissipation | P_D | 75 | mW |
| Forward Current | I_F | 30 | mA |
| * ¹ Peak Forward Current | I_{FP} | 100 | mA |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature | T_{opr} | -30~85 | °C |
| Storage Temperature | T_{stg} | -40~100 | °C |
| * ² Soldering Temperature | T_{sol} | 260°C for 3 seconds | |

*1. Duty ratio = 1/16, Pulse width = 0.1ms

*2. Keep the distance more than 2.0mm from PCB to the bottom of LED package

■ Electrical – Optical Characteristics

($T_a=25^\circ\text{C}$)

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------------|-----------------|-------------------|------|----------|------|------|
| Forward Voltage | V_F | $I_F=20\text{mA}$ | - | 2.0 | 2.5 | V |
| Dominant Wavelength | λ_p | $I_F=20\text{mA}$ | - | 621 | - | nm |
| Spectrum Bandwidth | $\Delta\lambda$ | $I_F=20\text{mA}$ | - | 25 | - | nm |
| Reverse Current | I_R | $V_R=5\text{V}$ | - | - | 10 | uA |
| * ³ Half Angle | $\theta_{1/2}$ | $I_F=20\text{mA}$ | - | ± 17 | - | deg |

*3. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity

■ Luminous intensity ranks

(Ta=25°C)

| Iv RANK | Test Condition | Min. | Typ. | Max. | Unit |
|---------|-----------------------|------|------|------|------|
| P | I _F = 20mA | 1200 | – | 1700 | mcd |
| Q | | 1700 | – | 2400 | |
| R | | 1700 | – | 2400 | |
| S | | 2400 | – | 3400 | |

* Luminous intensity is tested at a current pulse duration of 25 ms and an accuracy of ±11%.

Intensity Measured : 0.01sr(CIE. LED_B)

■ Precautions On LED using

* To avoid optical difference, Please do not mix differently-ranked product.

■ Characteristic Diagrams

Fig. 1 I_F-V_F

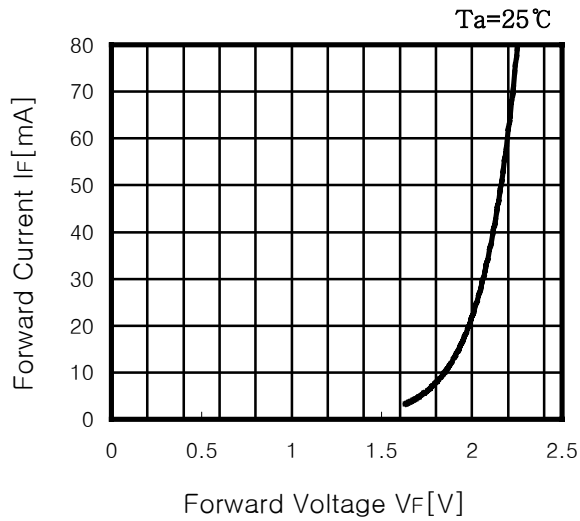


Fig. 2 I_V-I_F

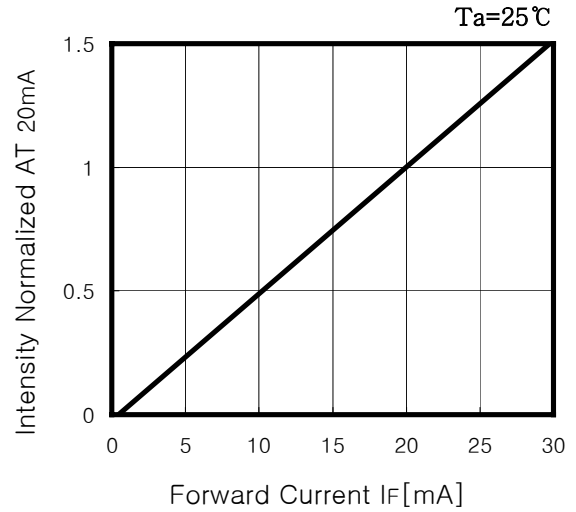


Fig. 3 Spectrum Distribution

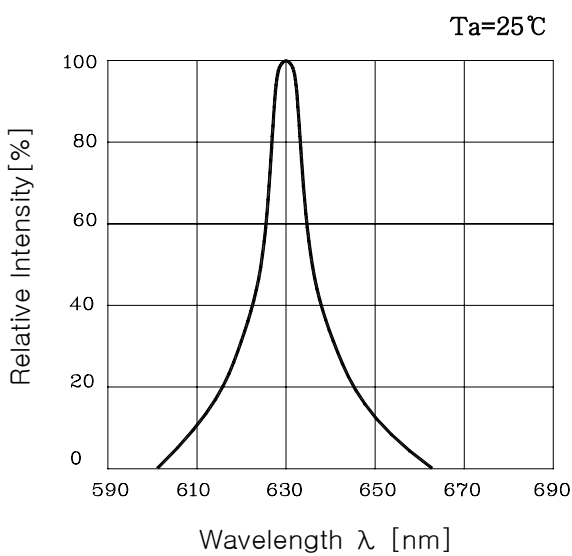


Fig. 4 Relative Intensity- T_a

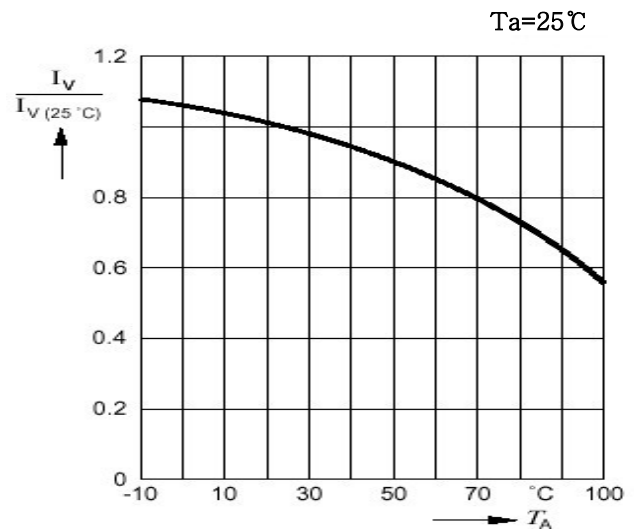
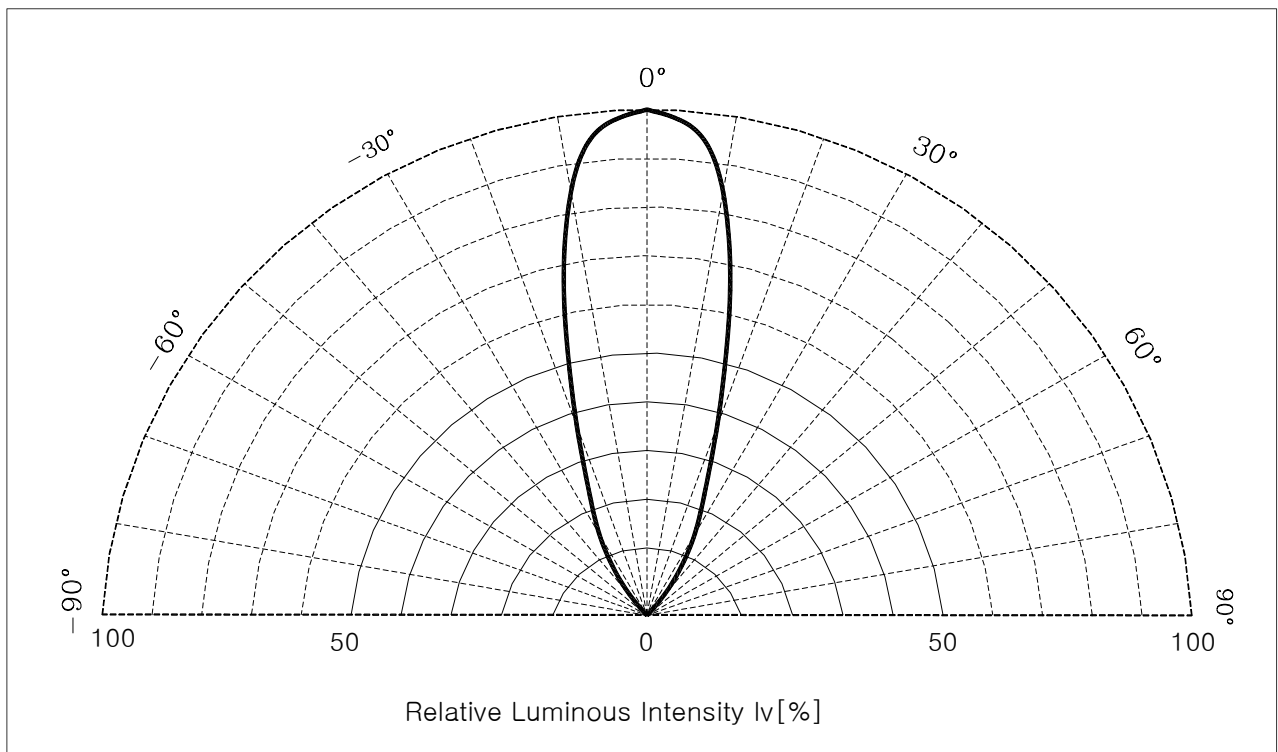


Fig. 5 Radiation Diagram



■ Revision history sheet

| Spec NO. | | | |
|----------|----------------------------|---------------------|---------|
| Title | Specification for Approval | | |
| Times | Date | Summary of revision | Remarks |
| 1 | 2001. 07. 15 | 신규제정 | |
| 2 | 2003. 02. 26 | Format 변경 | |