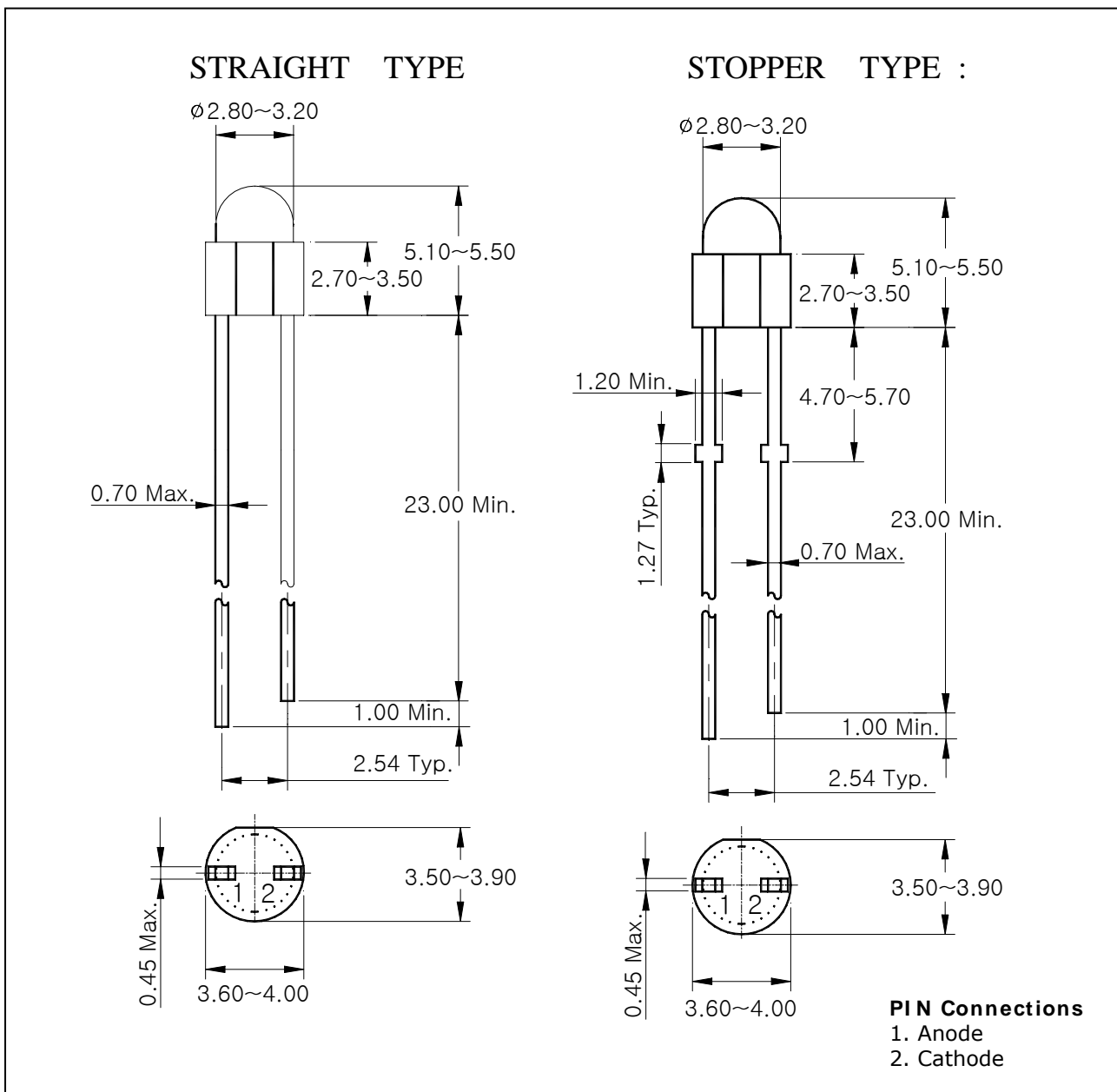


1. Features

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

2. Outline Dimensions

unit : mm



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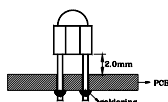
3. Absolute Maximum Ratings

(Ta=25°C)

| Characteristic | Symbol | Rating | 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 | 4 | V |
| Operating temperature range | T_{opr} | -30~85 | °C |
| Storage temperature range | T_{stg} | -30~100 | °C |
| *2 Soldering temperature | T_{sol} | 260°C for 10 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



4. Electrical / Optical Characteristics

(Ta=25°C)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|------------------------|-----------------|----------------|------|----------|------|---------|
| *3 Forward voltage | V_F | $I_F = 5\mu A$ | 1.3 | - | 1.7 | V |
| *3 Forward voltage | V_F | $I_F = 20mA$ | - | 2.1 | 2.4 | V |
| *4 Luminous intensity | I_V | $I_F = 20mA$ | 2900 | - | 5940 | mcd |
| *5 Dominant wavelength | λ_D | $I_F = 20mA$ | 615 | 620 | - | nm |
| Spectrum bandwidth | $\Delta\lambda$ | $I_F = 20mA$ | - | 30 | - | nm |
| Reverse current | I_R | $V_R = 4V$ | - | - | 10 | μA |
| *6 Half angle | $\theta_{1/2}$ | $I_F = 20mA$ | - | ± 22 | - | deg |

*3. Forward voltage maximum tolerance for each grade classification limit is $\pm 0.1V$ *4. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$ *5. Dominant wavelength maximum tolerance for each grade classification limit is $\pm 1nm$ *6. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity

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◆ $V_F / I_V / \lambda_D$ Grade Classification ($T_a=25^\circ\text{C}$)

| Test Condition @ $I_F = 20\text{mA}$ | | |
|--------------------------------------|--------------------------|--------------------------|
| Forward Voltage [V] | Luminous Intensity [mcd] | Dominant Wavelength [nm] |
| 1 : 1.9~2.2 | T : 2900~5940 | a : 615~620 |
| 2 : 2.2~2.4 | | b : 620~625 |

(Do not use to combine grade classification. It must be used separately grade classification)

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5. Characteristic Diagrams

Fig. 1 $I_F - V_F$

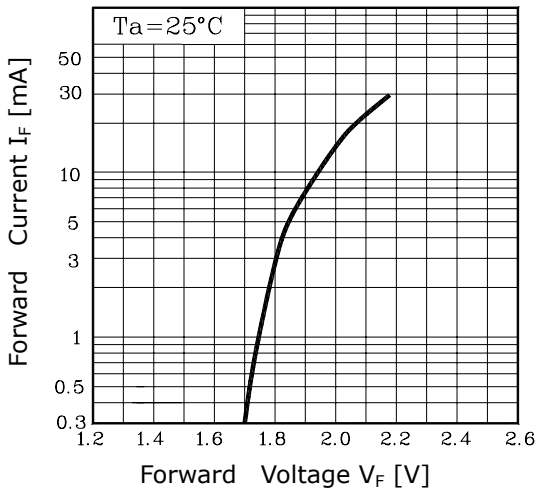


Fig. 2 $I_V - I_F$

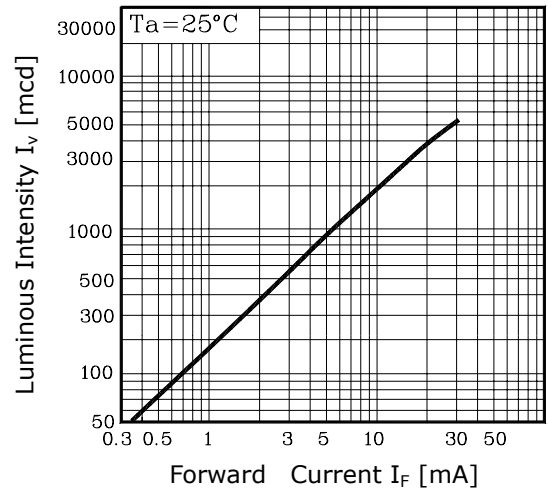


Fig. 3 $I_F - T_a$

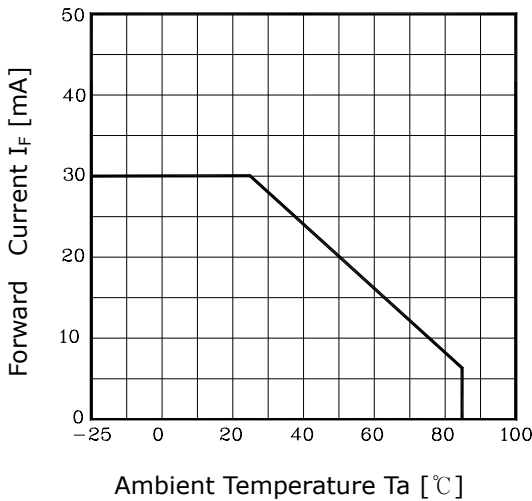


Fig.4 Spectrum Distribution

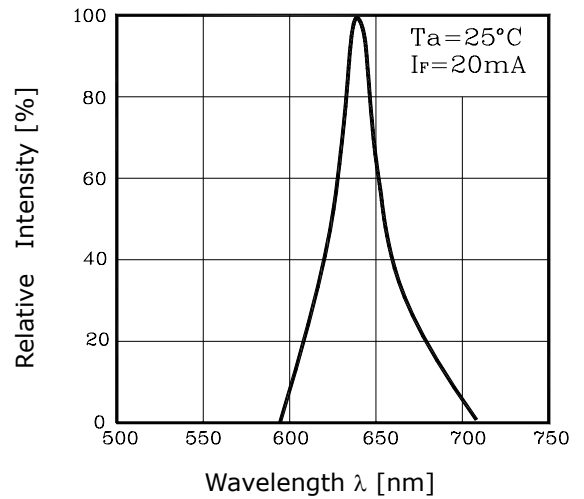
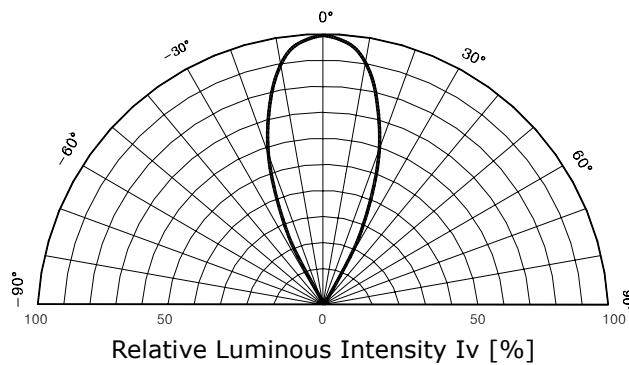


Fig. 5 Radiation Diagram



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