

SPECIFICATION FOR APPROVAL

Part No.: 220100005

Form Designer:

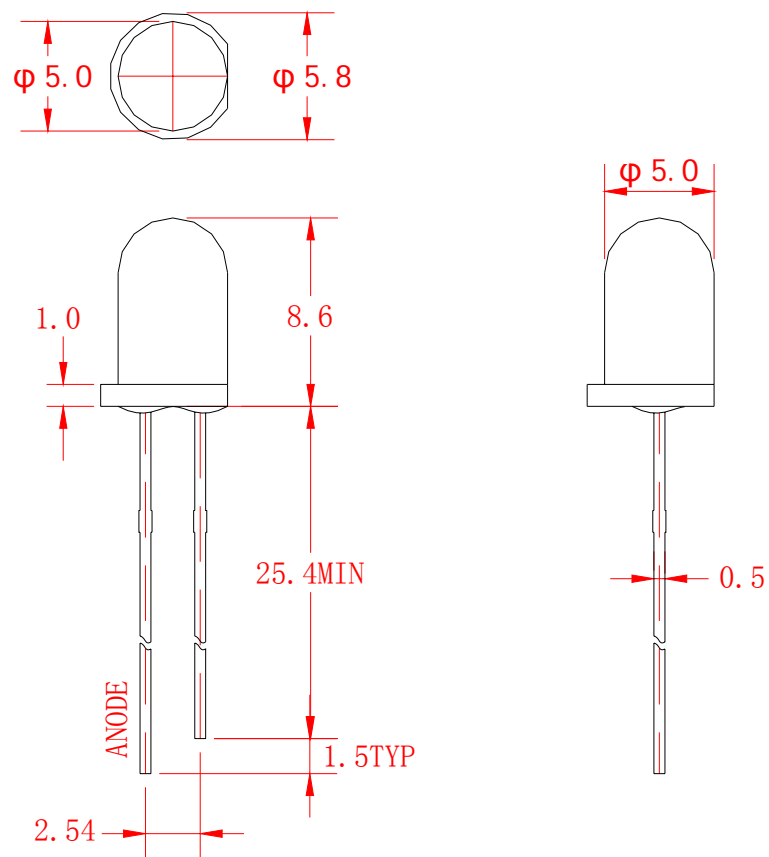
Engineer:

Quality Controller:

Product Characteristics:

- ❖ Ultra Bright
- ❖ 5mm Diameter Circular Shape Package
- ❖ General Purpose Lead
- ❖ Highly Reliable

Shape and Size:



| Part No. | Lens Color | Source Color |
|-----------|------------|--------------|
| 250100005 | White | Water clear |

Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.25 mm unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Parameter | MAX | Unit |
|--|---------------------|------|
| Power Dissipation | 120 | mW |
| Continuous Forward Current | 30 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -25°C to +80°C | |
| Storage Temperature Range | -30°C to +100°C | |
| Lead Soldering Temperature (4mm(.157") from Body) | 260°C for 5 seconds | |

Electrical Optical Characteristics at Ta=25°C

| Parameter | Symbol | Min | Typical | Max. | Unit | Test Condition |
|---------------------|-------------|----------------|---------|------|---------------|-------------------|
| Luminous Intensity | I_v | - | 10,000 | - | mcd | $I_F=20\text{mA}$ |
| Viewing Angle | θ | - | 20 | - | Deg | $I_F=20\text{mA}$ |
| Dominant Wavelength | λ_D | X=0.31, Y=0.32 | | | nm | $I_F=20\text{mA}$ |
| Forward Voltage | V_F | - | 3.2 | 4.0 | V | $I_F=20\text{mA}$ |
| Reverse Current | I_R | - | <1 | 10 | μA | $V_R=5\text{V}$ |

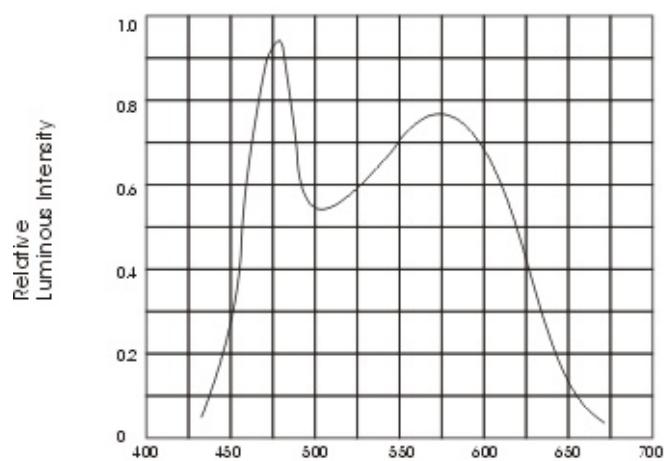
Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. Bin categories are established for classification of products.

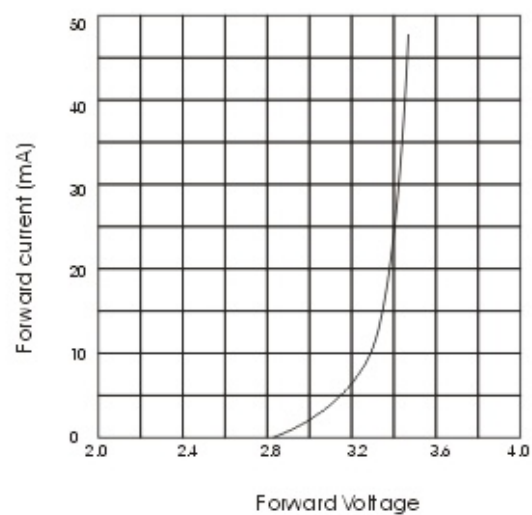
Typical Electro-Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

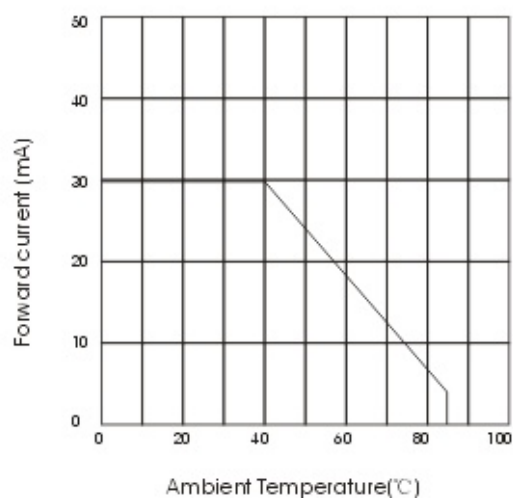
Relative Spectrum Distribution



Forward Current Vs Forward Voltage



Forward Current Relating Curve



Radiation Diagram

