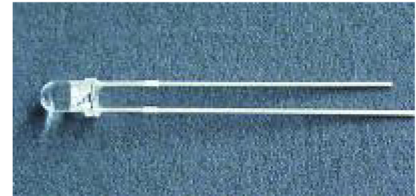


## Features

- High efficiency
- Low Power consumption
- General purpose leads
- Selected minimum intensities
- Available on tape and reel
- Pb free



## Descriptions

- The series is specially designed for applications requiring higher brightness
- The LED lamps are available with different colors, intensities, epoxy colors, etc
- Superior performance in outdoor environment

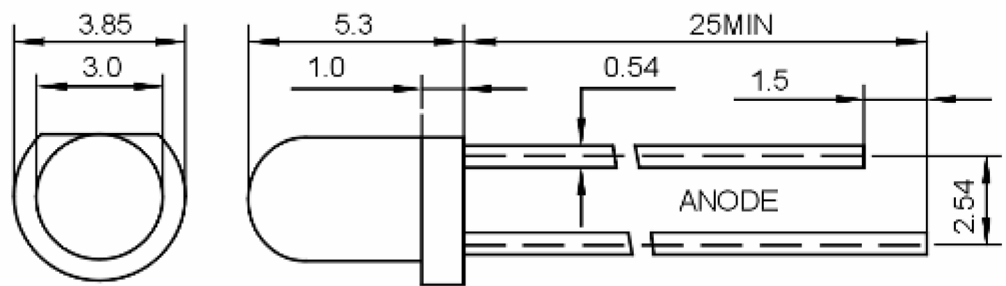
## Applications

- Status indicators
- Commercial use
- Advertising Signs
- Back lighting

## Device Selection Guide

|  | Chip     |               | Lens Color  |
|--|----------|---------------|-------------|
|  | Material | Emitted Color |             |
|  | AlGaInP  | Red           | Water clear |

## Package Dimensions



UNIT:mm

## Notes:

- Other dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Protruded resin under flange is 1.5mm Max LED.
- Bare copper alloy is exposed at tie-bar portion after cutting.

### Absolute Maximum Rating ( $T_a=25^{\circ}\text{C}$ )

| Parameter             | Symbol           | Absolute Maximum Rating | Unit               |
|-----------------------|------------------|-------------------------|--------------------|
| Forward Pulse Current | $I_{\text{FPM}}$ | 100                     | mA                 |
| Forward Current       | $I_{\text{FM}}$  | 30                      | mA                 |
| Reverse Voltage       | $V_{\text{R}}$   | 5                       | V                  |
| Power Dissipation     | $P_{\text{D}}$   | 140                     | mW                 |
| Operating Temperature | $T_{\text{opr}}$ | -40~+80                 | $^{\circ}\text{C}$ |
| Storage Temperature   | $T_{\text{stg}}$ | -40~+100                | $^{\circ}\text{C}$ |
| Soldering Heat (5s)   | $T_{\text{sol}}$ | 260                     | $^{\circ}\text{C}$ |

### Electro-Optical Characteristics ( $T_a=25^{\circ}\text{C}$ )

| Parameter                | Symbol               | Min. | Typ. | Max. | Unit          | Test Condition |
|--------------------------|----------------------|------|------|------|---------------|----------------|
| Luminous Intensity       | $I_{\text{v}}$       | 1500 | 2000 | ---  | mcd           | IF=20mA(Note1) |
| Viewing Angle            | $2\theta_{1/2}$      | ---  | 25   | ---  | Deg           | (Note 2)       |
| Peak Emission Wavelength | $\lambda_{\text{p}}$ | 620  | 630  | 635  | nm            | IF=20mA        |
| Spectral Line Half-Width | $\Delta\lambda$      | 15   | 20   | 25   | nm            | IF=20mA        |
| Forward Voltage          | $V_{\text{F}}$       | 1.9  | ---  | 2.3  | V             | IF=20mA        |
| Reverse Current          | $I_{\text{R}}$       | ---  | ---  | 10   | $\mu\text{A}$ | VR=5V          |

#### 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.

## Typical Electro-Optical Characteristics Curves

