



HUIYUAN ELECTRONIC CO.,LTD.

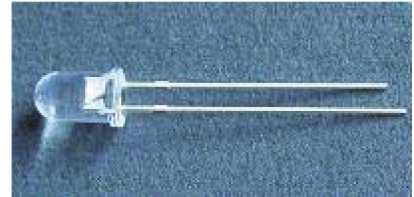
## TECHNOLOGY DATA SHEET & SPECIFICATIONS

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MODEL: 5034W2C-BUC-E

### Features

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



### 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

### Usage Notes:

- When using LED, it must use a protective resistor in series with DC current about 18-20mA

### Applications

- ◆ Outdoor and Indoor LED Display
- ◆ Lighting
- ◆ General Purpose Indicators
- ◆ Back Light
- ◆ VWS



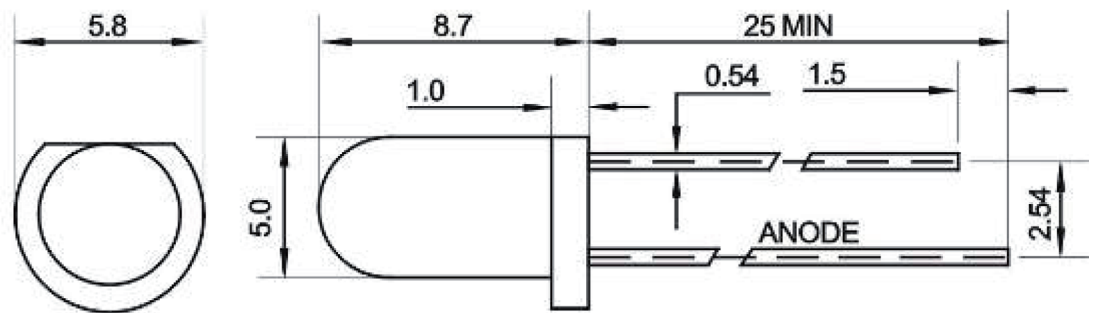
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### Device Selection Guide

| LED Part No.  | Chip     |               | Lens Color  |
|---------------|----------|---------------|-------------|
|               | Material | Emitted Color |             |
| 5034W2C-BUC-E | InGaN    | White         | 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.



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

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

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

| Parameter                | Symbol          | Min.  | Typ. | Max.  | Unit          | Test Condition  |
|--------------------------|-----------------|-------|------|-------|---------------|-----------------|
| Luminous Intensity       | $I_V$           | 20000 | ---  | 25000 | mcd           | IF=20mA(Note 1) |
| Viewing Angle            | $2\theta_{1/2}$ | ---   | 15   | ---   | Deg           | (Note 2)        |
| Peak Emission Wavelength | $\lambda_p$     | ---   | ---  | ---   | nm            | IF=20mA         |
| Spectral Line Half-Width | $\Delta\lambda$ | 25    | 30   | 35    | nm            | IF=20mA         |
| Forward Voltage          | $V_F$           | 2.9   | ---  | 3.3   | V             | IF=20mA         |
| Reverse Current          | $I_R$           | ---   | ---  | 10    | $\mu\text{A}$ | VR=5V           |

#### Note:

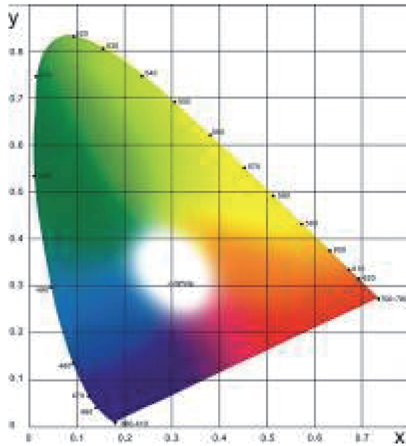
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



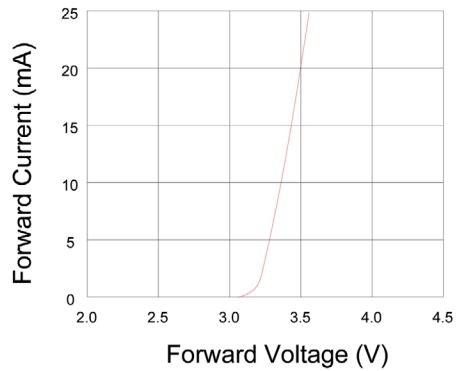
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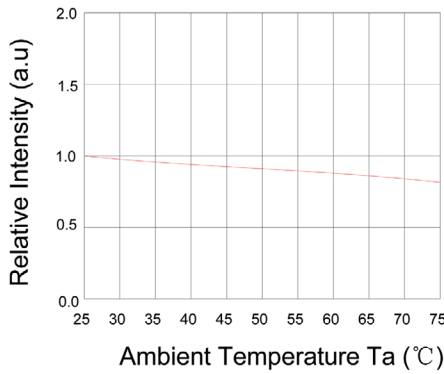
## Typical Electro-Optical Characteristics Curves



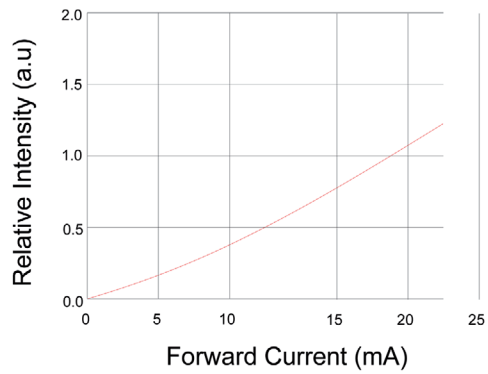
Forward Current VS.Forward Voltage



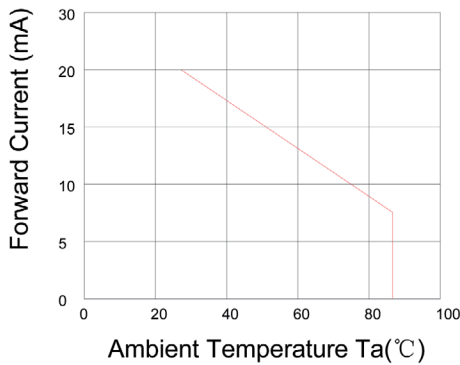
Relative Intensity VS. Ambient Temp



Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics

