

### **TECHNOLOGY DATA SHEET & SPECIFICATIONS**

MODEL: 3009R1G6C-DHE

#### **Features**

Two chips are matched for uniform light output, wide viewing angle

Long life-solid state reliability

I.C.compatible/Low power consumption

'Pb free

## **Descriptions**

The LED lamps contain two integral chips and is available as both bicolor and bipolar types

The Bright Red and Green light is emitted by diodes of GaAsP/GaP and GaAsP/GaP respectively

Type of bipolar lamps are both White Diffused and Color Diffused while the bicolor are White Diffused

#### **Usage Notes:**

Surge will damage the LED

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

## **Applications**

Status indicators

Commercial use

Advertising Signs

Back lighting





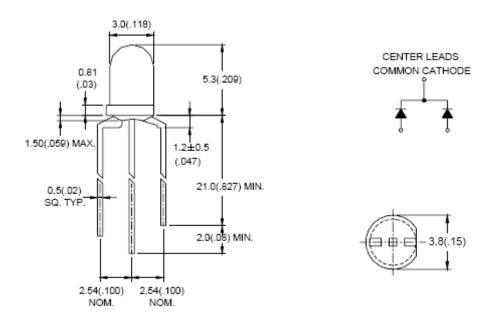
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## **Device Selection Guide**

| LED Part No.  | Cł        | nip           | 1           |  |
|---------------|-----------|---------------|-------------|--|
|               | Material  | Emitted Color | Lens Color  |  |
| 3009R1G6C-DHE | GaAsP/GaP | Red           |             |  |
|               | GaAsP/GaP | Green         | Water clear |  |

### **Package Dimensions**



#### 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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#### **Electro-Optical Characteristics (Ta=25**□)

| Parameter                   | Symbol            | Device | Min. | Тур. | Max.  | Unit  | Test<br>Condition |
|-----------------------------|-------------------|--------|------|------|-------|-------|-------------------|
| Luminous Intensity          | lv                | Red    | 500  |      | 900   | mcd   | IF=20mA           |
|                             |                   | Green  | 500  |      | 1000  |       |                   |
| Viewing Angle               | 2θ <sub>1/2</sub> | Red    |      | 35   |       | Deg   | (Note 1)          |
|                             |                   | Green  |      |      |       |       |                   |
| Peak Emission<br>Wavelength | λр                | Red    | 620  |      | 635   | nm    | IF=20mA           |
|                             |                   | Green  | 565  |      | 575   |       |                   |
| Spectral Line Half-Width    | Δλ                | Red    | 15   | 20   | 25    | nm    | IF=20mA           |
|                             |                   | Green  | 15   | 20   | 25    |       |                   |
| Forward Voltage             | V <sub>F</sub>    | Red    | 1.9  |      | 2.3   | V     | IF=20mA           |
|                             |                   | Green  | 1.9  |      | 2.3   |       |                   |
| Reverse Current             | I <sub>R</sub>    | Red    |      |      | 10 μΑ |       | \/D-5\/           |
|                             |                   | Green  |      |      |       | VR=5V |                   |

#### Note:

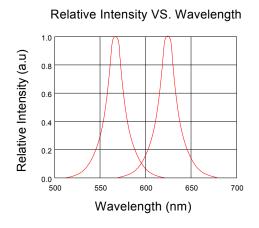
- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2.  $\theta$ 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

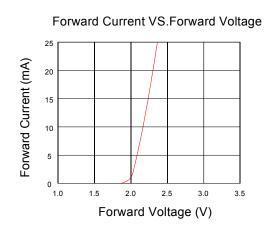


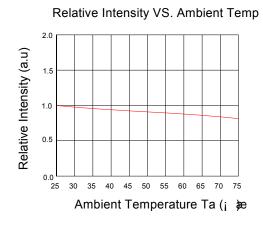
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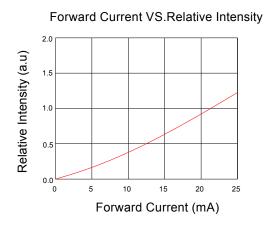
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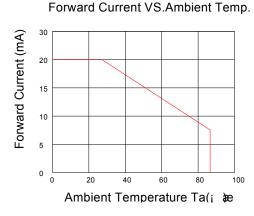
#### **Typical Electro-Optical Characteristics Curves**

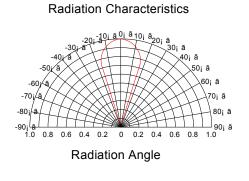














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#### **Notes**

- 1. Above specification may be changed without notice. HYLED will reserve authority on material change for above specification.
- 2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. HYLED assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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