



HUIYUAN OPTO-ELECTRONIC CO.,LTD.

## TECHNOLOGY DATA SHEET & SPECIFICATIONS

---

MODEL: 3009R1G6D-FHA

### 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



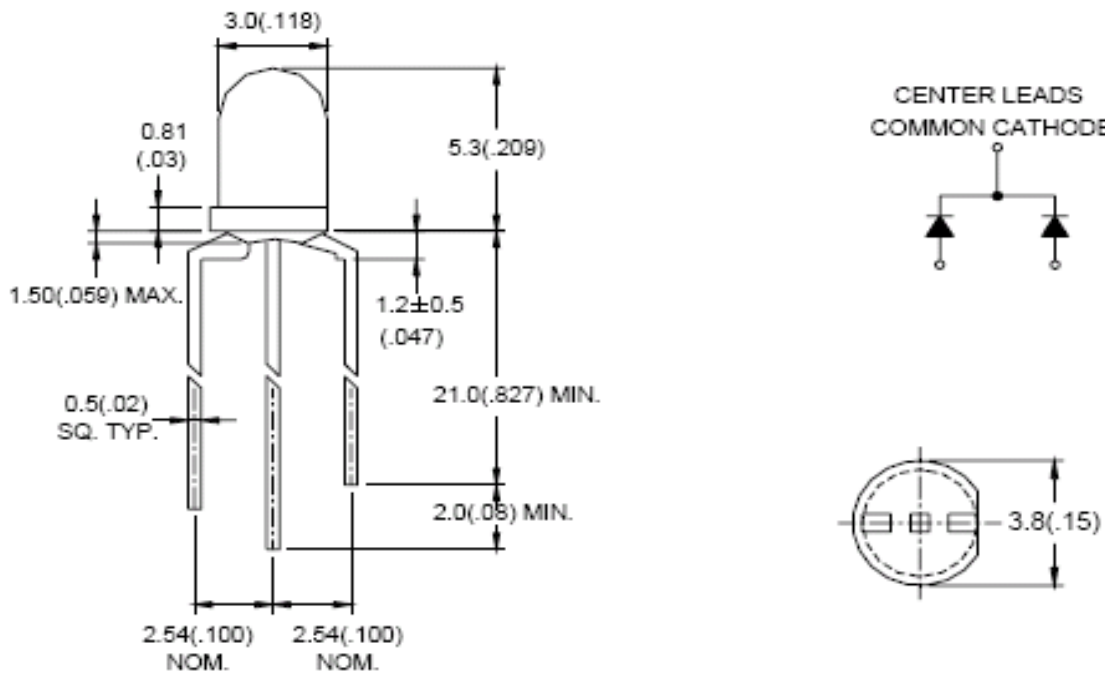
## TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3009R1G6D-FHA

### Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
3009R1G6D-FHA	AlGaInP	Red	White Diffused
	AlGaInP	Green	

### 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.



**TECHNOLOGY DATA SHEET & SPECIFICATIONS**

**MODEL: 3009R1G6D-FHA**

**Electro-Optical Characteristics (T<sub>a</sub>=25°C)**

Parameter	Symbol	Device	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	Red	15	--	25	mcd	IF=20mA
		Green	5	---	10		
Viewing Angle	2θ <sub>1/2</sub>	Red	---	35	---	Deg	(Note 1)
		Green					
Peak Emission Wavelength	λ <sub>p</sub>	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	μA	VR=5V
		Green	---	---			

**Note:**

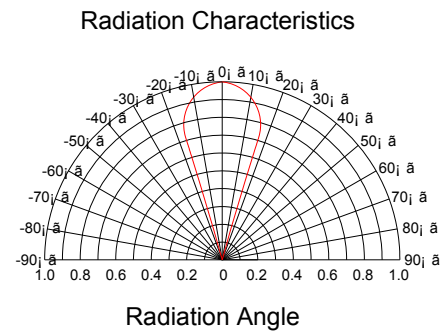
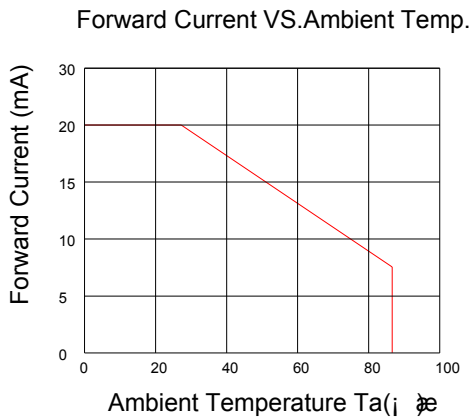
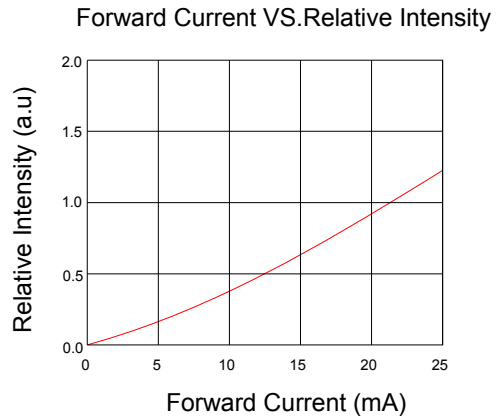
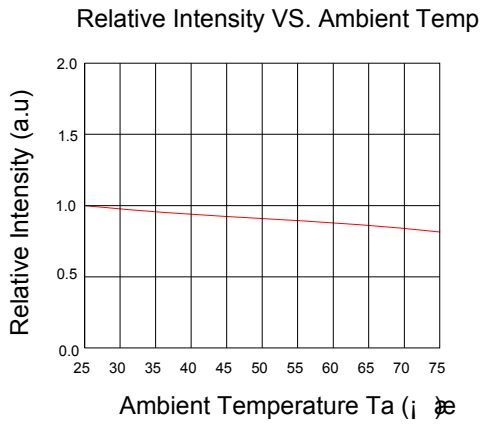
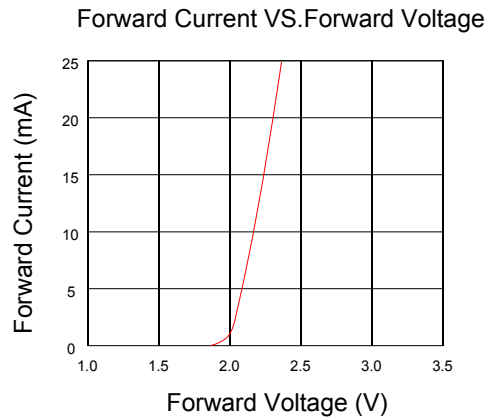
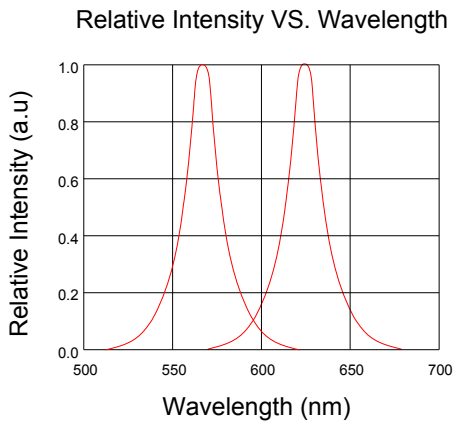
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



**TECHNOLOGY DATA SHEET & SPECIFICATIONS**

**MODEL: 3009R1G6D-FHA**

**Typical Electro-Optical Characteristics Curves**





HUIYUAN OPTO-ELECTRONIC CO.,LTD.

## TECHNOLOGY DATA SHEET & SPECIFICATIONS

---

MODEL: 3009R1G6D-FHA

### 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.
3. These specification sheets include materials protected under copyright of Hyled corporation. Please don't reproduce or cause anyone to reproduce them without Hyled's consent.