



HUIYUAN OPTO-ELECTRONIC CO.,LTD.

TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3004K3C-CA



Features

- High reliability
- High radiant intensity
- Peak wavelength $\lambda_p=940\text{nm}$
- Low forward voltage
- Pb free

Descriptions

- HYLED Infrared Emitting Diode is a high intensity diode, molded in a blue transparent plastic package
- The device is spectrally matched with phototransistor, photodiode and infrared receiver module

Usage Notes:

- Surge will damage the LED
- When using LED, it must use a protective resistor in series with DC current about 20mA

Applications

- Free air transmission system
- Infrared remote control units with high power requirement
- Smoke detector
- Infrared applied system



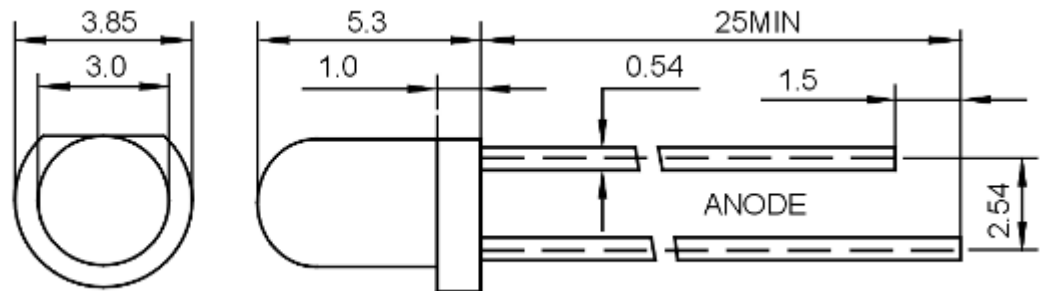
TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3004K3C-CA

Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
3004K3C-CA	AlGaAs	Infrared	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.



TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3004K3C-CA

Electro-Optical Characteristics (Ta=25□)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant intensity	Ee	7	---	12	mW/Sr	IF=20mA(Note1)
Viewing Angle	$2\theta_{1/2}$	---	30	---	Deg	(Note 2)
Peak Emission Wavelength	λ_p	---	940	---	nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$	---	45	---	nm	IF=20mA
Forward Voltage	V _F	1.2	---	1.5	V	IF=20mA
Reverse Current	I _R	---	---	10	μA	VR=5V

Note:

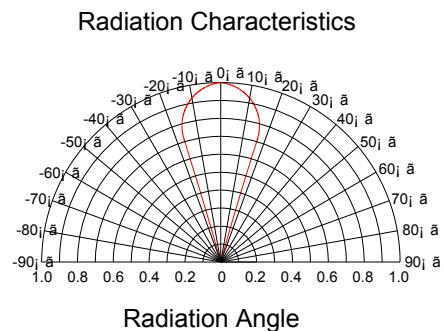
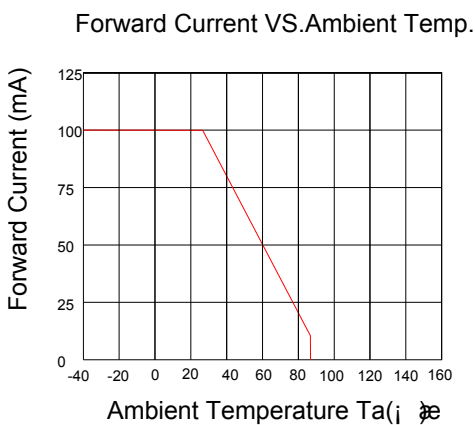
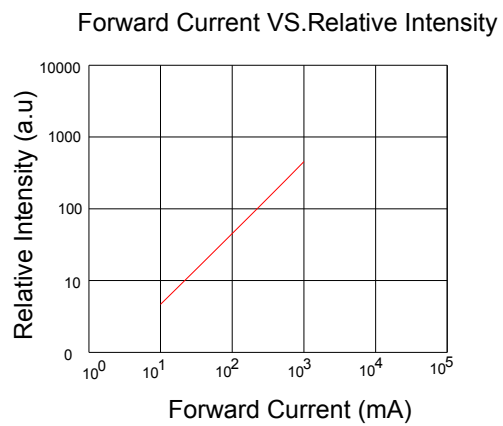
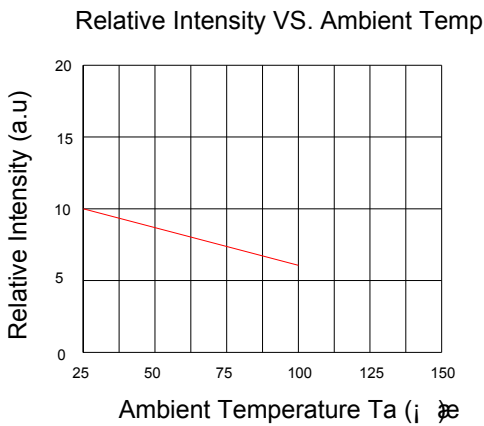
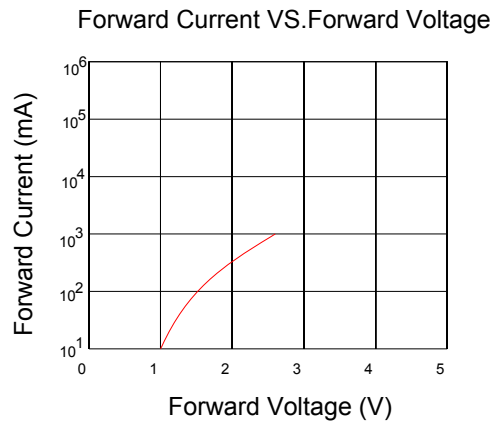
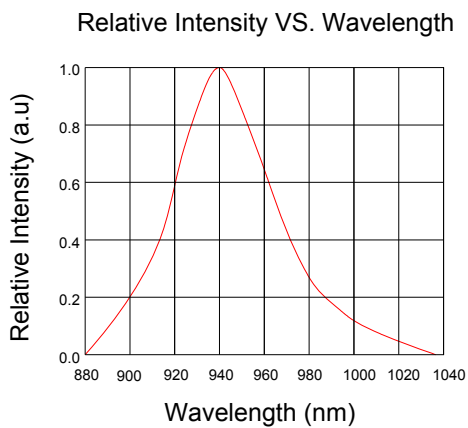
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3004K3C-CA

Typical Electro-Optical Characteristics Curves





HUIYUAN OPTO-ELECTRONIC CO.,LTD.

TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 3004K3C-CA

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.