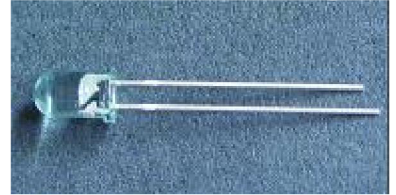


## TECHNOLOGY DATA SHEET & SPECIFICATIONS

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### Features

- High reliability
- High radiant intensity
- Peak wavelength  $\lambda_p=940\text{nm}$
- 2.54mm Lead spacing
- 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

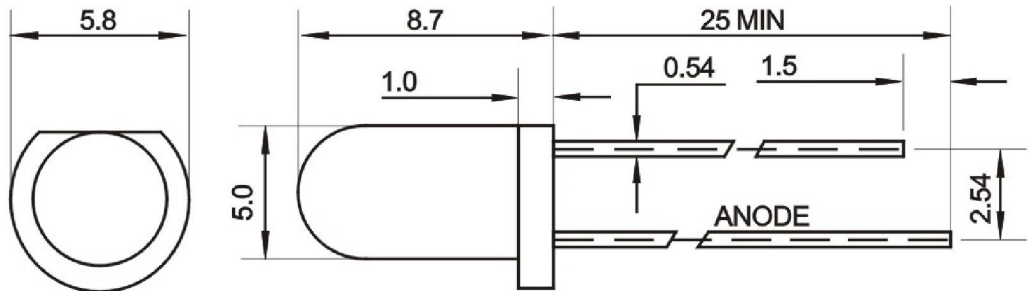
- Free air transmission system
- Infrared remote control units with high power requirement
- Smoke detector
- Infrared applied system

# TECHNOLOGY DATA SHEET & SPECIFICATIONS

## Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
	AlGaAs	Infrared	Blue Transparent

## 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.

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\* Bare copper alloy is exposed at tie-bar portion after cutting.

## Absolute Maximum Rating (T<sub>a</sub>=25°C)

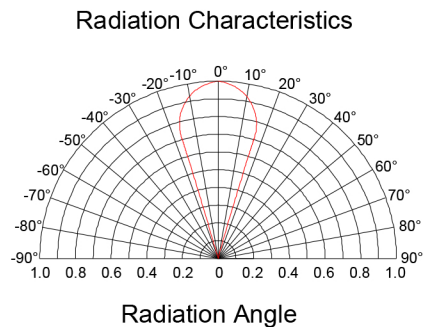
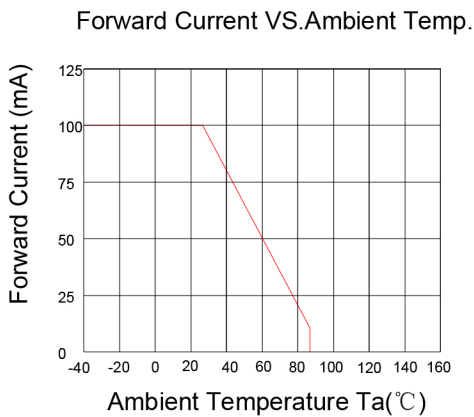
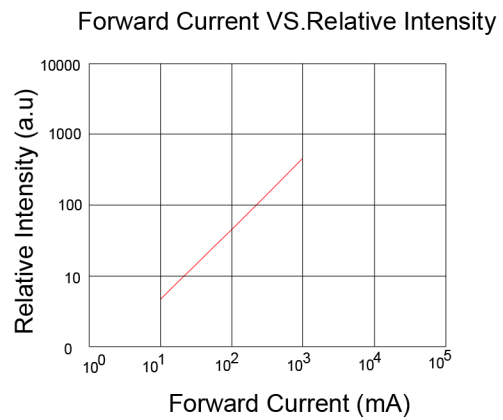
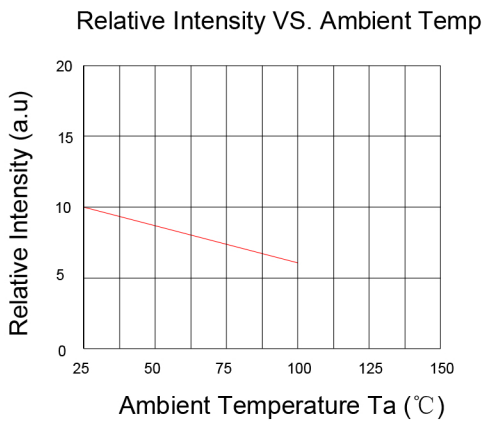
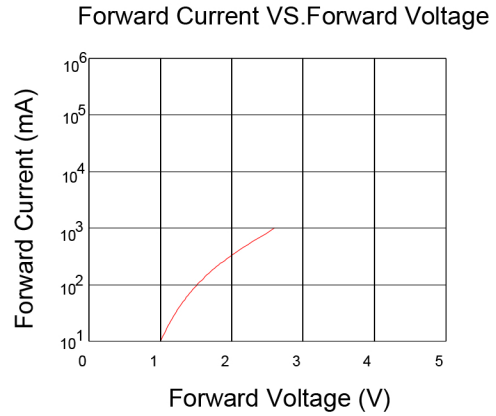
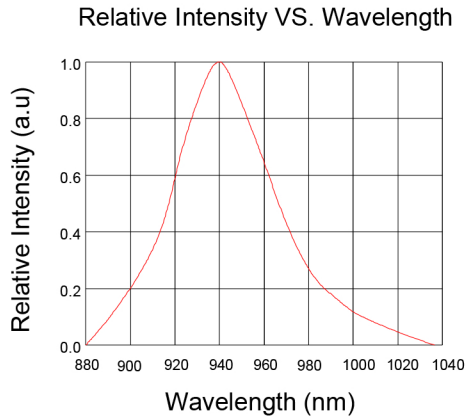
Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	I <sub>FPM</sub>	100	mA
Forward Current	I <sub>FM</sub>	30	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	140	mW
Operating Temperature	T <sub>opr</sub>	-40~+80	°C
Storage Temperature	T <sub>stg</sub>	-40~+100	°C
Soldering Heat (5s)	T <sub>sol</sub>	260	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant intensity	E <sub>e</sub>	8	10	15	mW/Sr	IF=20mA
Viewing Angle	2θ <sub>1/2</sub>	10	---	15	Deg	IF=20mA
Peak Emission Wavelength	λ <sub>p</sub>	---	940	---	nm	IF=20mA
Spectral Line Half-Width	Δλ	15	20	25	nm	IF=20mA
Forward Voltage	V <sub>F</sub>	1.0	---	1.5	V	IF=20mA
Reverse Current	I <sub>R</sub>	---	---	10	μA	VR=5V

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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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