

### **FEATURES**

- High efficiency.
- Low power consumption.
- General purpose leads.
- Selected minimum intensities.
- Available on tape and reel.
- **7** Pb free.

## **DESCRIPTIONS**

- **7** 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.

### **APPLICATIONS**

- Status indicators.
- 7 Commercial use.
- Advertising signs.
- Back lighting.

## **DEVICE SELECTION GUIDE**

LED Part No.		Lens Color	
	Material	Emitted Color	Lens Color
ARL-5313UYC-4.5cd	AlGaInP	Yellow	Water clear







CLEAR

YELLOW



#### **USAGE NOTES:**

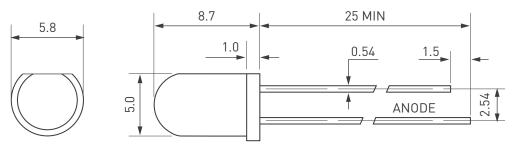
The ultra bright LED is an electrostatic insensitive device, so static electricity and surge will damage the LED. It is required to wear a wrist-band when handling the LED. All device, equipment, machinery, desk and ground must be properly grounded.

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





## PACKAGE DIMENSIONS



Unit: mm.

#### Notes:

Other dimensions are in millimeters, tolerance is 0.25 mm except being specified.

Protruded resin under flange is 1.5 mm, Max LED.

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

## ABSOLUTE MAXIMUM RATING $(T_A = +25 \, ^{\circ}\text{C})$

Parameter	Symbol	Symbol Absolute Maximum Rating	
Reverse Voltage	$V_{_{\rm R}}$	5	V
Operating Temperature	Topr	-40 +80	°C
Storage Temperature	Tstg -40+100		°C
Soldering Heat (5s)	Tsol	260	°C

# ELECTRO-OPTICAL CHARACTERISTICS $(T_A = +25 \, ^{\circ}\text{C})$

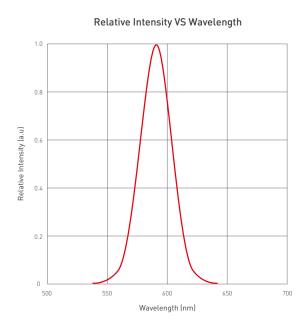
Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	lv	3000	_	5000	mcd	If=20mA (Note 1)
Viewing Angle	2θ1/2	_	25	_	Deg	Note 2
Peak Emission Wavelength	$\lambda_{P}$	580	590	595	nm	If=20mA
Spectral Line Half-Width	Δλ	20	25	30	nm	If=20mA
Forward Voltage	V <sub>F</sub>	1.9	_	2.3	٧	If=20mA
Reverse Current	I <sub>R</sub>	_	-	10	μΑ	VR=5V

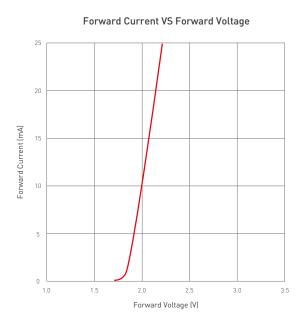
#### Note:

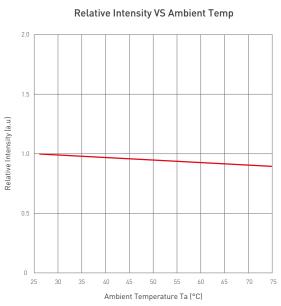
- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2.  $\theta_{\eta/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

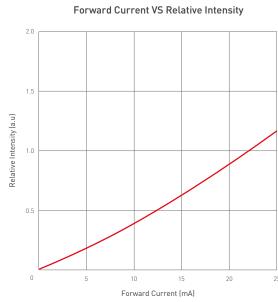


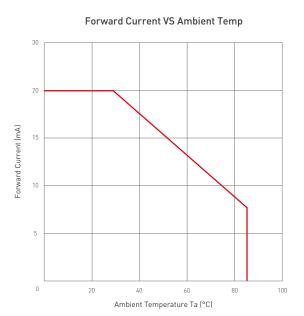
# TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

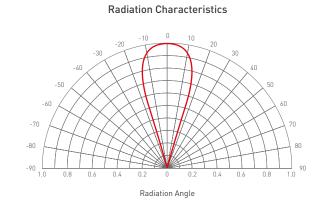














### **NOTES**

- 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.