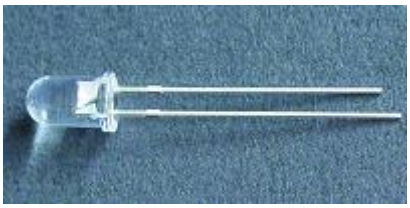
ARL-5613UWC-12cd



Features

High efficiency

Low Power consumption

General purpose leads

Selected minimum intensities

Available on tape and reel

Pb free

Applications

Status indicators

Commercial use

Advertising Signs

Back lighting

Descriptions

The series is specially designed for applications requiring higher brightness

The LED lamps are available with different colors, intensities, epoxy colors, etc

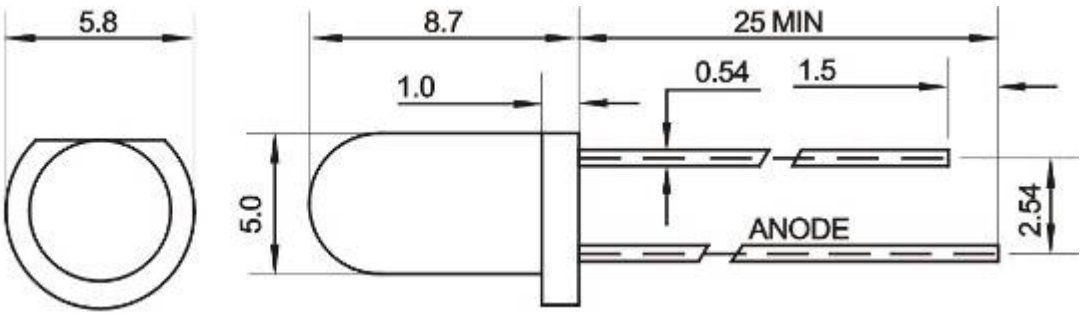
Superior performance in outdoor environment

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 20mA

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.

Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5613UWC-12cd	InGaN	Cold White	Water clear

Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Absolute Maximum Rating	Unit
Reverse Voltage	V_R	5	V
Operating Temperature	Topr	-40～+80	□
Storage Temperature	Tstg	-40～+100	□
Soldering Heat (5s)	Tsol	260	□

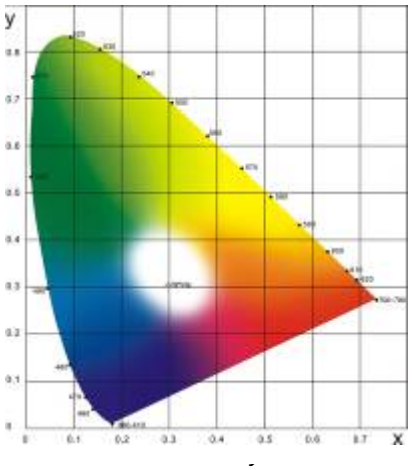
Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	12000	16000	18000	mcd	IF=20mA(Note 1)
Viewing Angle	$2\theta_{1/2}$	10	15	20	Deg	(Note 2)
Peak Emission Wavelength	λp	7000-8000K X=0.26 Y=0.28			nm	IF=20mA
Spectral Line Half-Width	△λ	15	25	30	nm	IF=20mA
Forward Voltage	V_F	2.9	---	3.5	V	IF=20mA
Reverse Current	I_R	---	---	10	μA	VR=5V

Note:

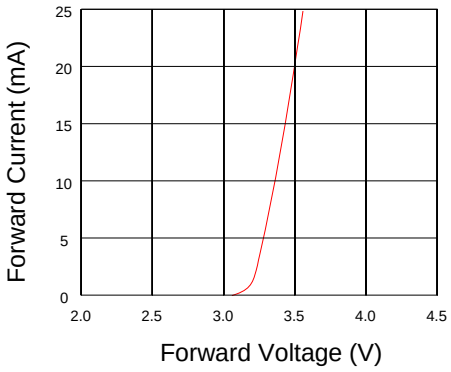
1. *Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.*
2. *$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.*

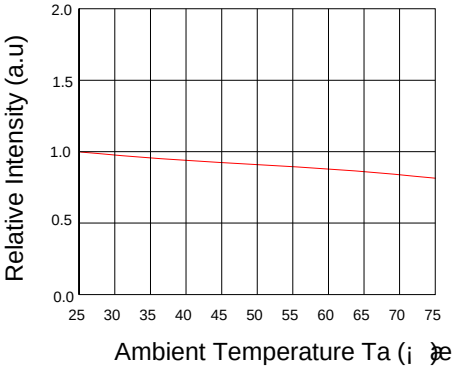
Typical Electro-Optical Characteristics Curves



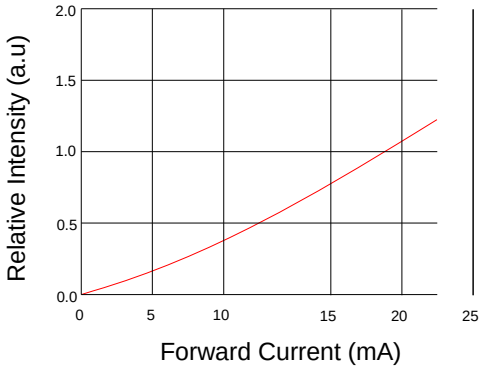
emp

Forward Current VS.Forward Voltage

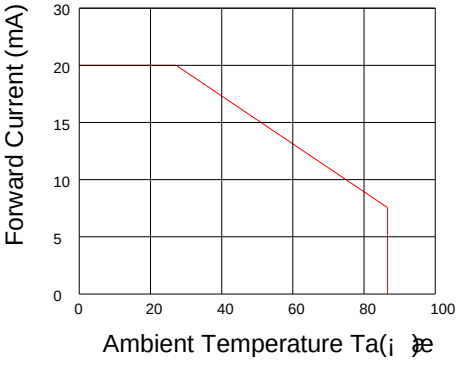




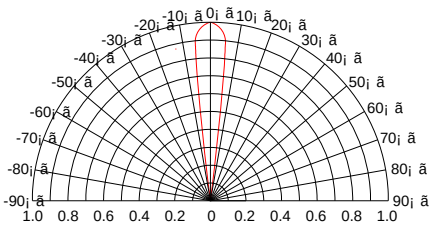
Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics



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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