

FEATURES

- High efficiency.
- Zero 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.
- 7 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.

5 mm





CLEAR

WHITE



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.

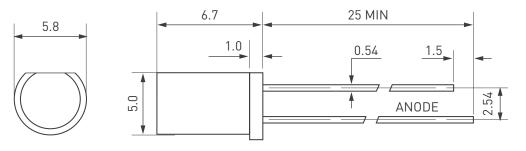
DEVICE SELECTION GUIDE

LED Part No		Lens Color		
LED Part No.	Material	Emitted Color	Lens Color	
ARL-5923UWC-3.5cd-E	InGaN	White	Water Clear	





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 Absolute Maximum Rating		Unit
Peak Forward Current	I _{FPM} 60		mA
Forward Current	I _{FM}	25	mA
Reverse Voltage	$V_{_{\rm R}}$	5	V
Power Dissipation	$\mathbf{P}_{_{\mathrm{D}}}$	180	mW
Operating Temperature	Topr	-40 +80	°C
Storage Temperature	Tstg	-40 +100	°C
Soldering Heat (5s)	Tsol	260	°C

ELECTRO-OPTICAL CHARACTERISTICS (T_A=+25°C)

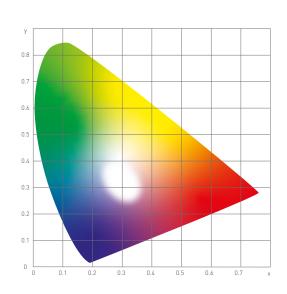
Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	I _v	2000	_	3600	mcd	If=20mA (Note 1)
Viewing Angle	201/2	80	_	100	Deg	Note 2
Peak Emission Wavelength	$\lambda_{_{P}}$	X=0.33 CRI: Y=0.32 6500-7500 K			nm	If=20mA
Spectral Line Half-Width	Δλ	25	30	35	nm	If=20mA
Forward Voltage	V _F	2.9	_	3.5	٧	If=20mA
Reverse Current	I _R	_	_	10	μΑ	VR=5V

Note:

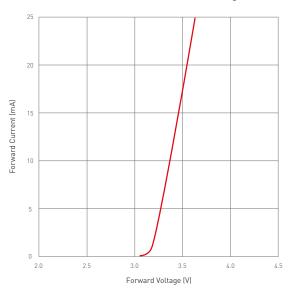
- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



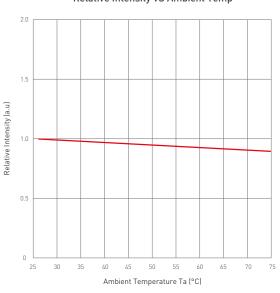
TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES



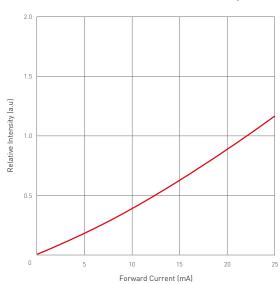
Forward Current VS Forward Voltage



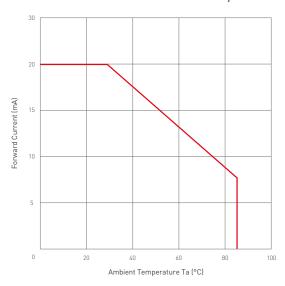
Relative Intensity VS Ambient Temp



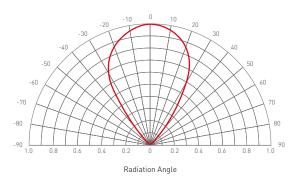
Forward Current VS Relative Intensity



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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