

FEATURES

- Electricity control IC embedded.
- Fancy, fun, hottest in the market.
- Lens size with 5/8/10 mm options.
- Viewing angles: 40°.
- → Operating voltage range: DC 3-5 V.
- **7** Blinking frequency: 1.8 Hz.
- 7 Frequency tolerance: ±20%.
- RoHS compliant.

DESCRIPTIONS

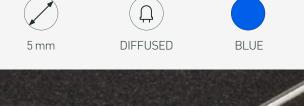
- New trend creations.
- Low energy consumptions.
- Low maintenance costs.
- High application design flexibility.
- High reliability.

APPLICATIONS

- 7 Toys / sports utilities.
- Miniature key chains.
- Effect lights.
- Display / decoration lights.
- Electronic displays and signals.
- Interior decoration lights.
- Indicator lights.
- ▼ Solar energy lights / garden lights.

DEVICE SELECTION GUIDE

LED Part No.		Lana Calan	
	Material	Emitted Color	Lens Color
ARL-5013UBD-B	InGaN	Blue	Blue Diffused





USAGE NOTES:

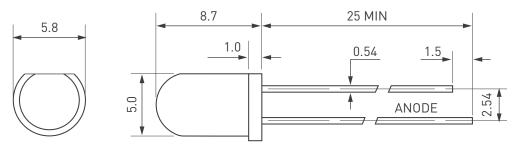
Surge will damage the LED.

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	
Forward Pulse Current	I _{FPM}	I _{FPM} 100	
Forward Current	I _{FM}	30	mA
Reverse Voltage	V _R	5	V
Power Dissipation	$\mathbf{P}_{\scriptscriptstyle \mathrm{D}}$	100	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	lv	400	_	600	mcd	If=20mA (Note 1)
Viewing Angle	201/2	_	30	_	Deg	Note 2
Peak Emission Wavelength	λ_{P}	460	465	470	nm	If=20mA
Spectral Line Half-Width	Δ_{λ}	15	20	25	nm	If=20mA
Turn on Time	Duty		1/20		ms	If=20mA
Blinking Frequency	Fled		1.8		Hz	If=20mA
Forward Voltage	V _F	3.0	_	5.0	٧	If=20mA
Reverse Current	I _R	_	_	10	μА	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.



NOTES

- 1. Above specification may be changed without notice. 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. 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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