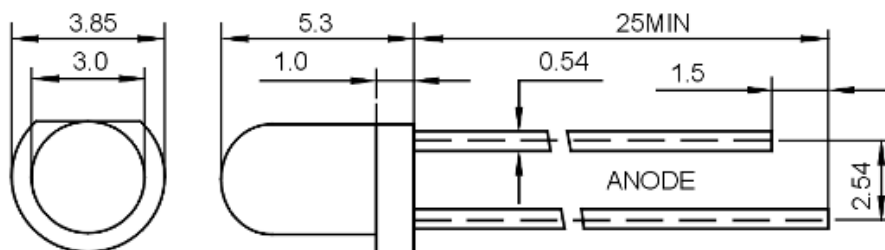




## ARL-3014URBC-B

### Package Dimensions



UNIT:mm

### Features

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

**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.

### Description

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

### Usage Notes

Surge will damage the LED  
When using LED, it must use a protective resistor in series with DC current about 20mA

### Applications

- 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

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

Parameter	Symbol	Absolute Maximum Rating	Units
Forward Pulse Current	I <sub>FPM</sub>	70	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	Topr	-40 ~ +80	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	Tsol	260	°C

## Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Device	Min	Typ.	Max.	Units	Test Conditions
Luminous Intensity	I <sub>v</sub>	Red Blue	1000 1000	--- ---	2500 2500	mcd	IF=20mA
Viewing Angle	2θ <sub>1/2</sub>	Red Blue	---	40	---	Deg	(Note 1)
Peak Emission Wavelength	λ <sub>p</sub>	Red Blue	620 460	625 465	630 470	nm	IF=20mA
Spectral Line Half-Width	λ	Red Blue	25 30	30 35	35 40	nm	IF=20mA
Forward Voltage	V <sub>F</sub>	Red Blue	3.0 3.0	--- ---	5.0 5.0	V	IF=20mA
Reverse Current	I <sub>R</sub>	Red Blue	---	---	10	μA	VR=5V
Blinking frequency	Fled			1.8		Hz	VR=5V

## Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-3014URBC-B	AlGaInP	Red	White clear
	InGaN	Blue	

## Typical Electro-Optical Characteristics Curves

