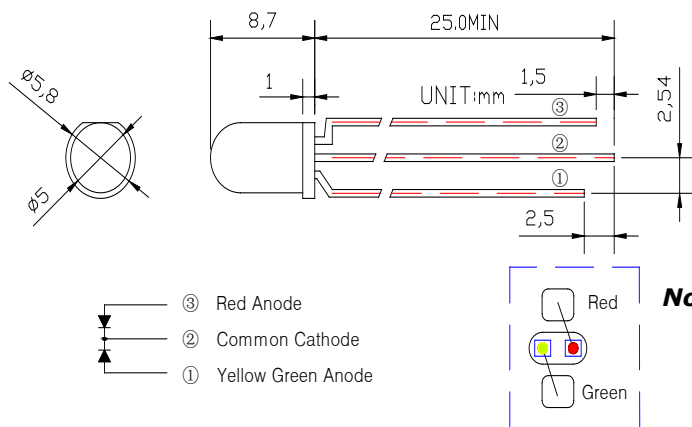


# ARL-5013UEUGC/3L

## Package Dimensions



**Notes:** 1. Other dimensions are in millimeters, tolerance is 0.25mm except being specified.  
 2. Protruded resin under flange is 1.5mm Max LED.  
 3. Bare copper alloy is exposed at tie-bar portion after cutting.

## Features

- Two chips are matched for uniform light output, wide viewing angle
- Long life-solid state reliability
- I.C.compatible/Low power consumption
- Pb free

## Applications

- Status indicators
- Commercial use
- Advertising Signs
- Back lighting

## Description

- The LED lamps contain two integral chips and is available as both bicolor and bipolar types
- The Bright Red and Green light is emitted by diodes of GaAsP/GaP and GaAsP/GaP respectively
- Type of bipolar lamps are both White Diffused and Color Diffused while the bicolor are White Diffused

## Usage Notes

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

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

Parameter	Symbol	Absolute Maximum Rating	Units
Peak Forward Current	I <sub>FPM</sub>	100	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

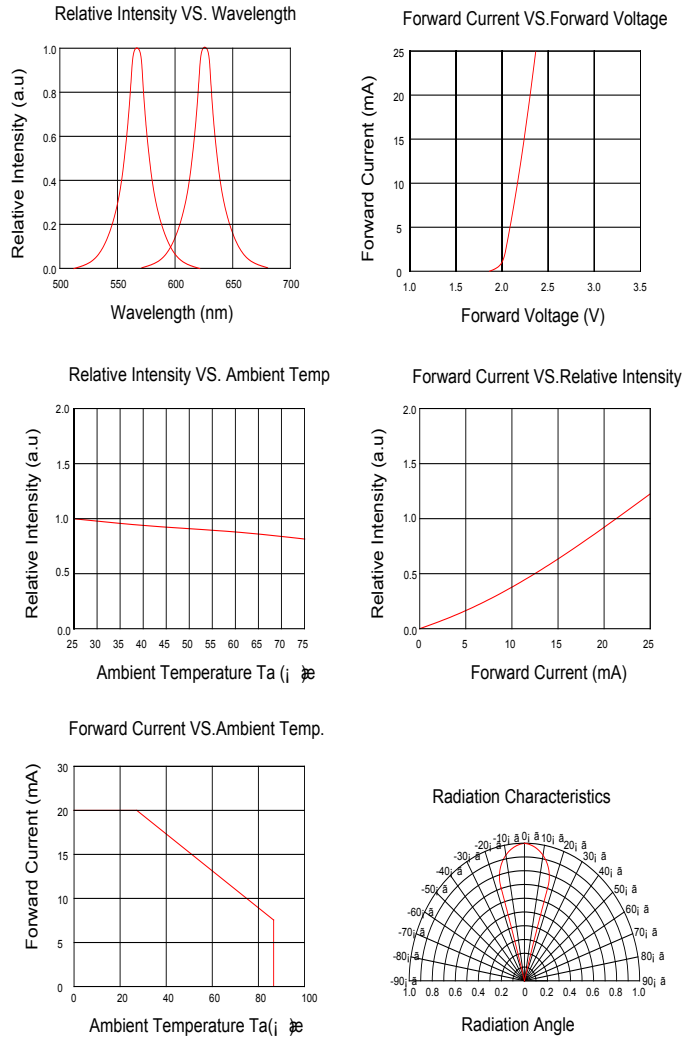
## Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5013UEUGC/3L	AlGaInP	Red	Water clear
	AlGaInP	Green	Water clear

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

Parameter	Symbol	Device	Min	Typ.	Max.	Units	Test Conditions
Luminous Intensity	I <sub>v</sub>	Red	1000	---	2000	mcd	IF=20mA
		Green	500	---	1000		
Viewing Angle	2θ1/2	Red	30	---	40	Deg	(Note 1)
		Green					
Peak Emission Wavelength	λ <sub>p</sub>	Red	620	630	635	nm	IF=20mA
		Green	565	570	575		
Spectral Line Half-Width	Δλ	Red	15	20	25	nm	IF=20mA
		Green	15	20	25		
Forward Voltage	V <sub>F</sub>	Red	1.9	---	2.3	V	IF=20mA
		Green	1.9	---	2.5		
Reverse Current	I <sub>R</sub>	Red	---	---	10	μA	VR=5V
		Green	---	---			

## Typical Electro-Optical Characteristics Curves



- Notes:**
- Above specification may be changed without notice. ARLIGHT will reserve authority on material change for above specification.
  - When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. ARLIGHT 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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