ARL-5013URBC-B

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

Descriptions

- 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

Applications

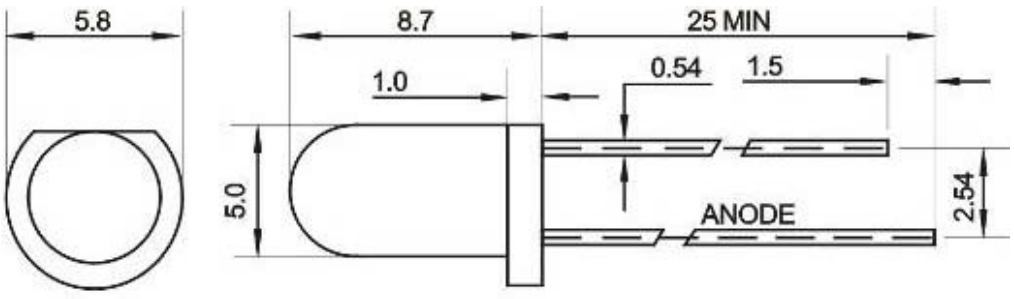
- Status indicators
- Commercial use
- Advertising Signs
- Back lighting

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

Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5013URBC-B	AlGaInP	Red	Water clear
	InGaN	Blue	

Paskage Dimensions



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.

Absolute Maximum Rating

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	IFPM	70	mA
Forward Current	IFM	30	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	140	mW
Operating Temperature	Topr	-40°+80	°C
Storage Temperature	Tstg	-40°+100	°C
Soldering Heat (5s)	Tsol	260	°C

Electric-optical characteristics

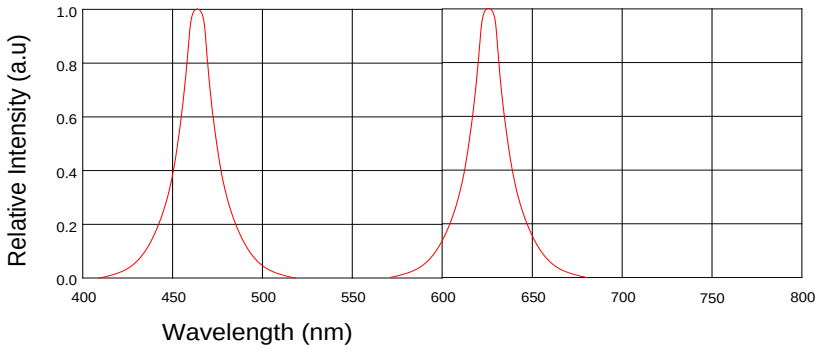
Parameter	Symbol	Device	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Red	2500	---	4500	mcd	IF=20mA
		Blue	2000	---	3000		
Viewing Angle	2θ1/2	Red	40	---	50	Deg	(Note 1)
		Blue					
Peak Emission Wavelength	λp	Red	620	625	630	nm	IF=20mA
		Blue	460	465	470		
Spectral Line Half-Width	λ	Red	25	30	35	nm	IF=20mA
		Blue	30	35	40		
Forward Voltage	VF	Red	3.0	---	5.0	V	IF=20mA
		Blue	3.0	---	5.0		
Reverse Current	IR	Red	---	---	10	μA	VR=5V
		Blue					

Notes

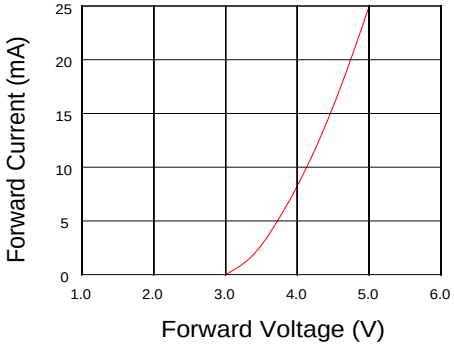
1. Above specification may be changed without notice. Company will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Company assumes no responsibility 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.
3. These specification sheets include materials protected under copyright of Company corporation. Please don’t reproduce or cause anyone to reproduce them without Company consent.

Typical Electro-Optical Characteristics Curves

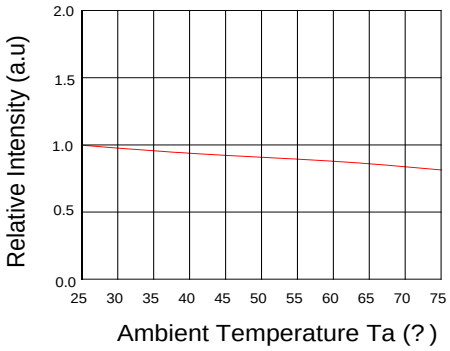
Relative Intensity VS. Wavelength



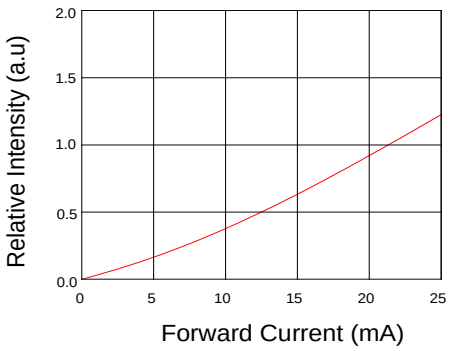
Forward Current VS.Forward Voltage



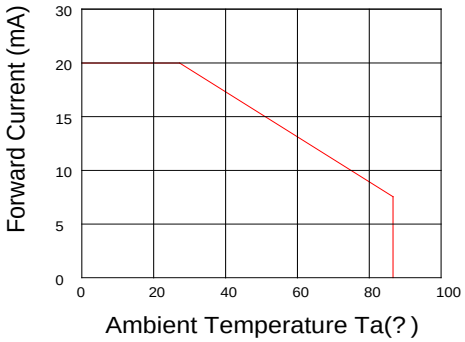
Relative Intensity VS. Ambient Temp



Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics