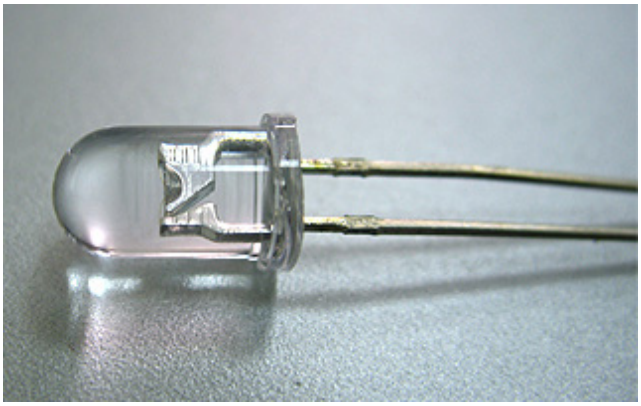
Светодиод

ARL-5213URC-10cd



FEATURES

- High efficiency.
- Low Power consumption.
- General purpose leads.
- Selected minimum intensities.
- Available on tape and reel.
- Pb free.

DESCRIPTIONS

- The series is specially designed for applications requiring higher brightness.
- The LED lamps are available with different colors, intensities, epoxy colors, etc.
- Superior performance in outdoor environment.

USAGE NOTES

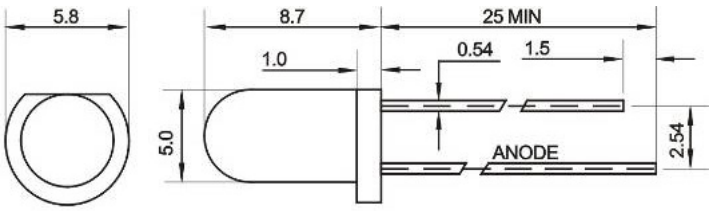
- The ultra bright LED is an electrostatic insensitive device, so static electricity and surge will damage the LED. It is required to wear a wrist-band when handling the LED. All device, equipment, machinery, desk and ground must be properly grounded.
- When using LED, it must use a protective resistor in series with DC current about 20mA.

APPLICATIONS

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

DEVICE SELECTION GUIDE

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5213URC-10cd	AlGaInP	Red	Water clear



USAGE 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 (TA=25°c)

Parameter	Symbol	Absolute Maximum Rating	Unit
Reverse Voltage	VR	5	V
Operating Temperature	Topr	-40°C ~ +80	°C
Storage Temperature	Tstg	-40°C ~ +100	°C
Soldering Heat (5s)	Tsol	260°C	°C

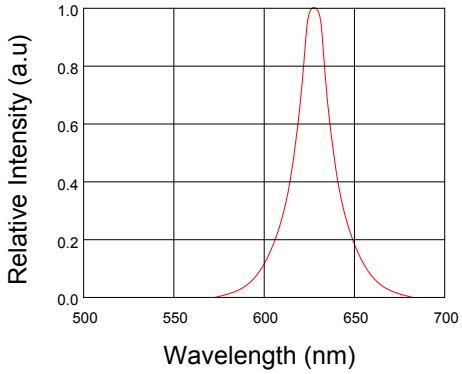
Electro-optical characteristics (TA=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	10000	11000	13000	mcd	IF=20mA(Note1)
Viewing Angle	2θ1/2	10	15	20	Deg	(Note 2)
Peak Emission Wavelength	λp	620	630	635	nm	IF=20mA
Spectral Line Half-Width	Δλ	15	20	25	nm	IF=20mA
Forward Voltage	VF	1.9	---	2.5	V	IF=20mA
Reverse Current	IR	---	---	10	μA	VR=5V

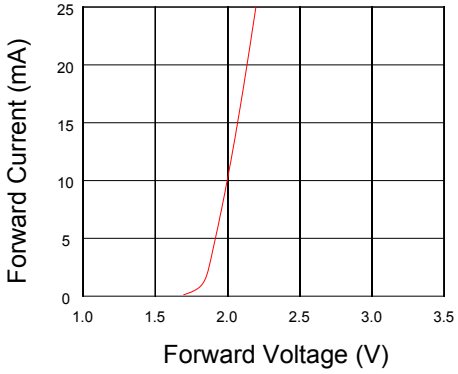
Notes
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Typical Electro-Optical Characteristics Curves

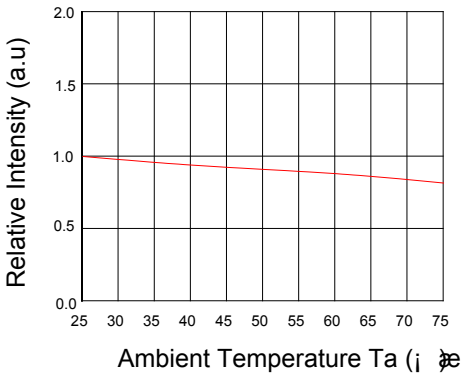
Relative Intensity VS. Wavelength



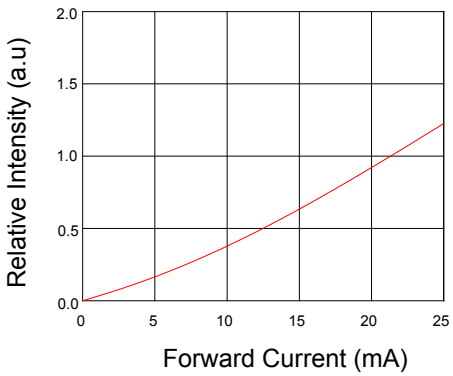
Forward Current VS.Forward Voltage



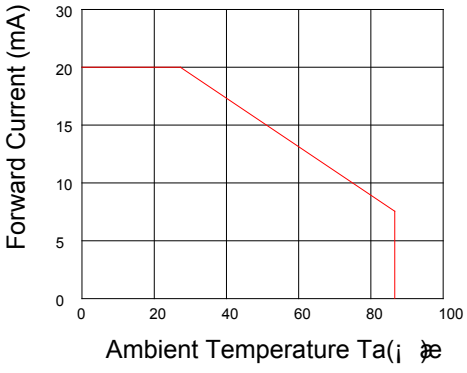
Relative Intensity VS. Ambient Temp



Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics