ARL-5053UYC-800mcd

Features

- High efficiency
- Low Power consumption
- General purpose leads
- 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

Applications

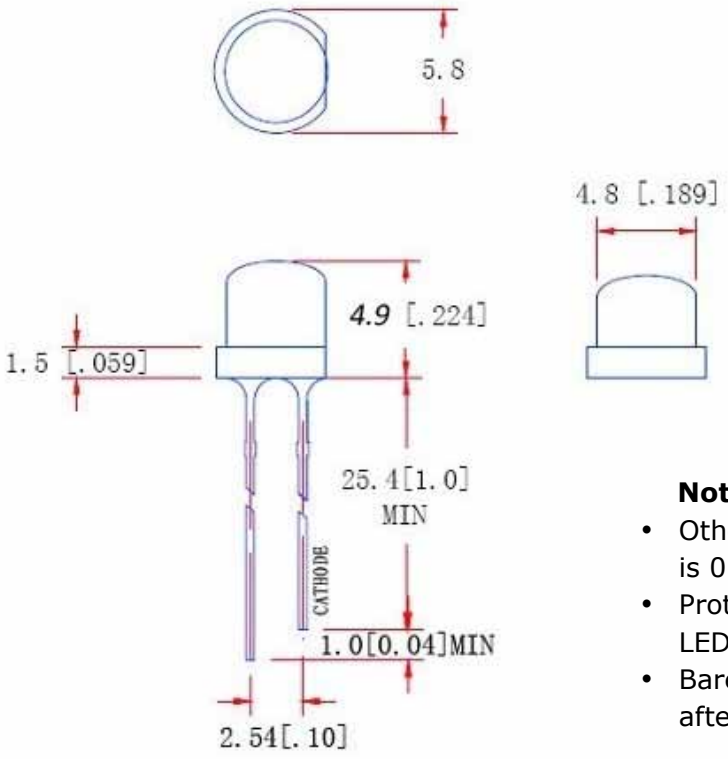
- Status indicators
- Commercial use
- Advertising Signs
- Back lighting

Usage Notes

- Surge will damage the LED
- 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-5053UYC-800mcd	AlGaInP	Yellow	Water clear

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 (Ta=25°C)

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	IFPM	100	mA
Forward Current	IFM	30	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	85	mW
Operating Temperature	Topr	-40°C+80	°C
Storage Temperature	Tstg	-40°C+100	°C
Soldering Heat (5s)	Tsol	260	°C

Electric-optical characteristics

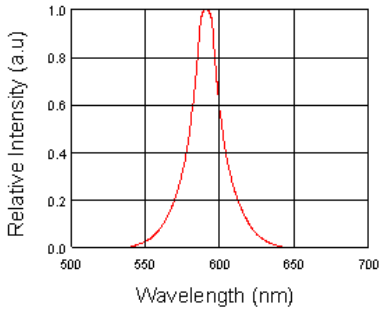
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	---	500	750	mcd	IF=20mA(Note1)
Viewing Angle	2θ1/2	100	---	120	Deg	(Note 2)
Peak Emission Wavelength	λp	580	590	595	nm	IF=20mA
Spectral Line Half-Width	λ	15	19	23	nm	IF=20mA
Forward Voltage	VF	1.8	---	2.3	V	IF=20mA
Reverse Current	IR	---	---	10	μA	VR=5V

Notes

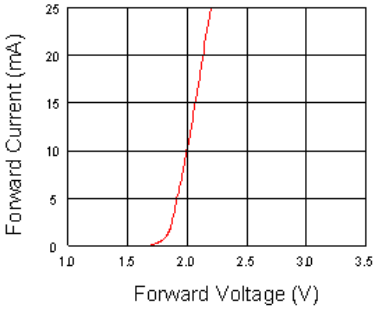
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Typical Electro-Optical Characteristics Curves

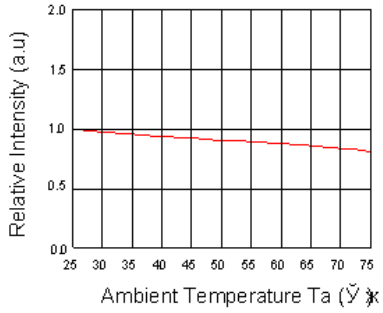
Relative Intensity VS. Wavelength



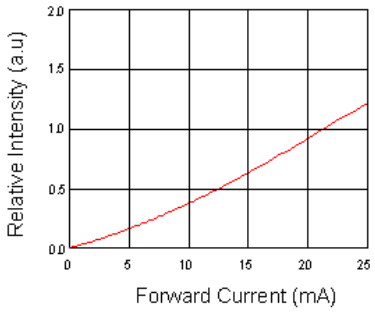
Forward Current VS.Forward Voltage



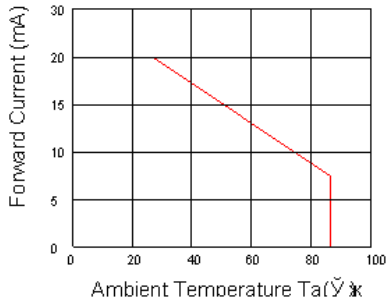
Relative Intensity VS. Ambient Temp



Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics