

# ВЫВОДНОЙ СВЕТОДИОД КРУГЛЫЙ

**ARL-3514URD-150mcd**

## 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.

## APPLICATIONS

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

## DEVICE SELECTION GUIDE

LED Part No.	CHIP		Lens Color
	Material	Emitted Color	
<b>ARL-3514URD-150mcd</b>	<b>AlGaInP</b>	<b>Red</b>	<b>Color Diffused</b>



3 mm



DIFFUSE



### USAGE NOTES:

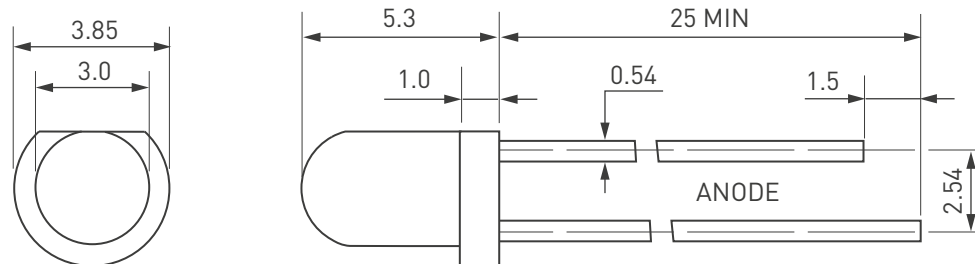
Surge will damage the LED.

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



**ATTENTION!**  
ELECTROSTATIC SENSITIVE DEVICES.  
OBSERVE PRECAUTIONS FOR HANDLING.

## PACKAGE DIMENSIONS



Unit: mm.

### Notes:

Other dimensions are in millimeters, tolerance is 0.25 mm except being specified.

Protruded resin under flange is 1.5 mm, max LED.

Bare copper alloy is exposed at tie-bar portion after cutting.

## ABSOLUTE MAXIMUM RATING ( $T_A = +25^\circ\text{C}$ )

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	$I_{FPM}$	100	mA
Forward Current	$I_{FM}$	30	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	140	mW
Operating Temperature	$T_{opr}$	-40... +80	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40... +100	$^\circ\text{C}$
Soldering Heat (5s)	$T_{sol}$	260	$^\circ\text{C}$

## ELECTRO-OPTICAL CHARACTERISTICS ( $T_A = +25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	100	—	150	mcd	$I_f=20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$	—	40	—	Deg	Note 2
Peak Emission Wavelength	$\lambda_P$	620	630	635	nm	$I_f=20\text{mA}$
Spectral Line Half-Width	$\Delta\lambda$	15	20	25	nm	$I_f=20\text{mA}$
Forward Voltage	$V_F$	1.9	—	2.3	V	$I_f=20\text{mA}$
Reverse Current	$I_R$	—	—	10	$\mu\text{A}$	$V_R=5\text{V}$

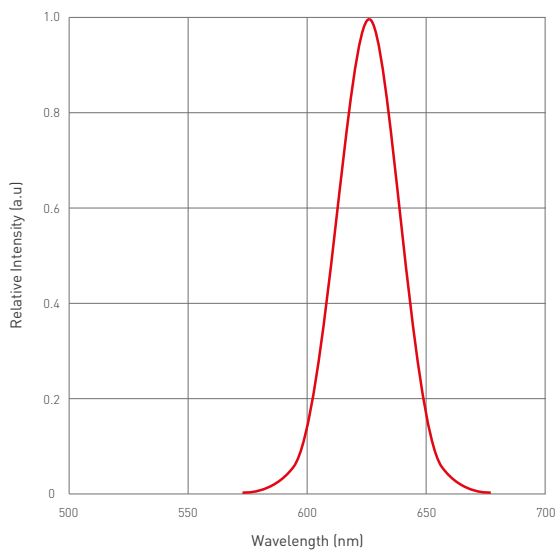
### Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

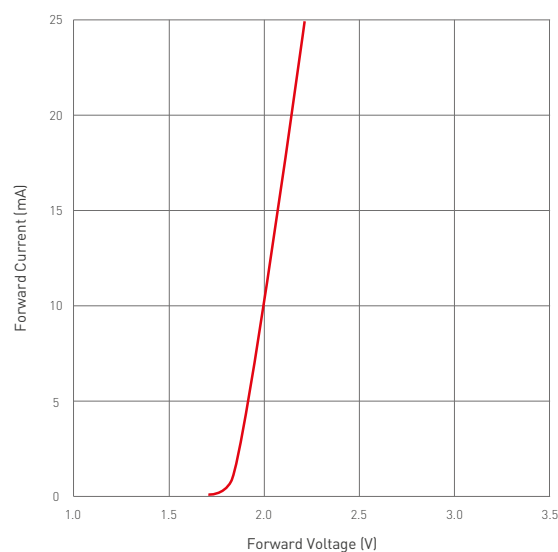
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

# TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

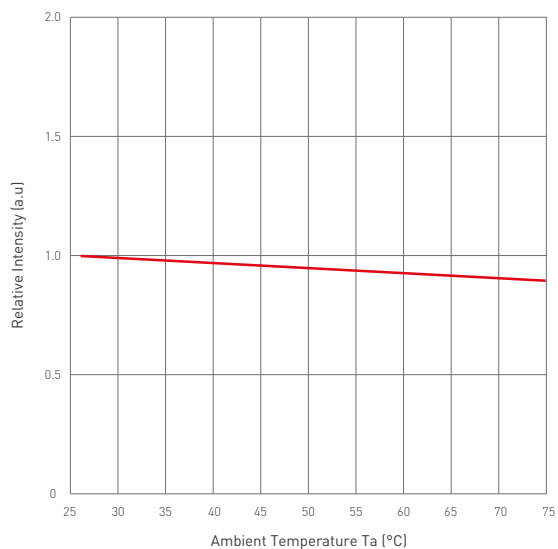
Relative Intensity VS Wavelength



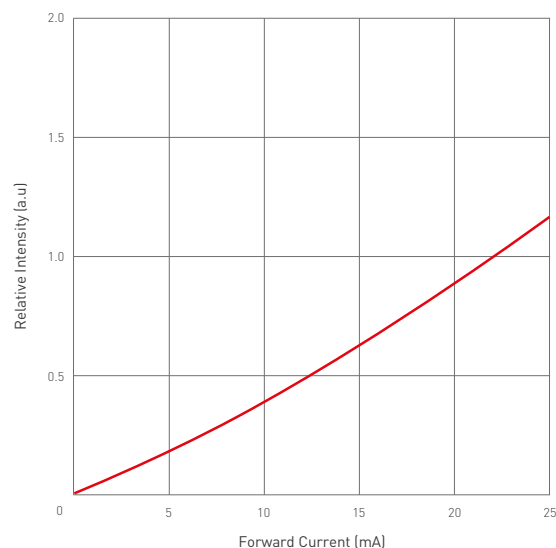
Forward Current VS Forward Voltage



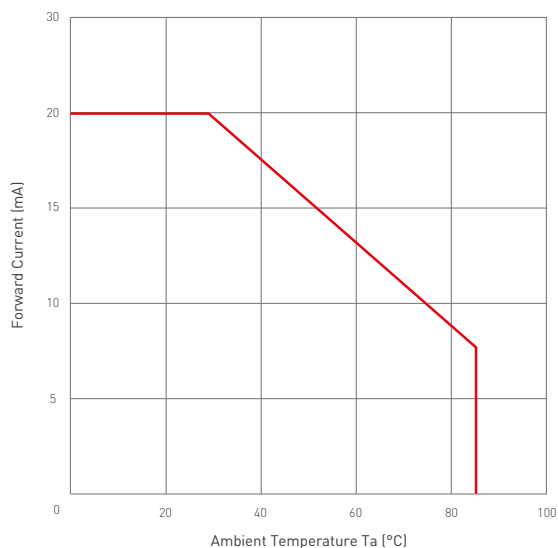
Relative Intensity VS Ambient Temp



Forward Current VS Relative Intensity



Forward Current VS Ambient Temp



Radiation Characteristics

