

ВЫВОДНОЙ СВЕТОДИОД КРУГЛЫЙ

ARL-3214URC-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.

APPLICATIONS

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

DEVICE SELECTION GUIDE

| LED Part No. | CHIP | | Lens Color |
|-------------------------|----------------|---------------|--------------------|
| | Material | Emitted Color | |
| ARL-3214URC-10cd | AlGaInP | Red | Water clear |



3 mm



CLEAR



USAGE NOTES:

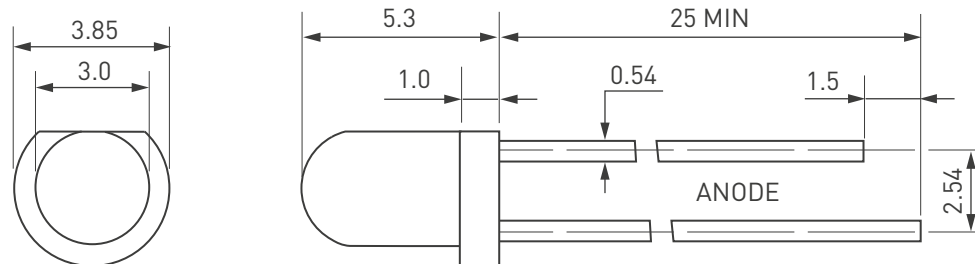
Surge will damage the LED.

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 |
|-----------------------|-----------|-------------------------|------------------|
| Reverse Voltage | V_R | 5 | V |
| 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 | 6000 | 7200 | 8000 | mcd | $I_f=20\text{mA}$ (Note 1) |
| Viewing Angle | $2\theta_{1/2}$ | — | 20 | — | Deg | Note 2 |
| Peak Emission Wavelength | λ_P | 620 | 625 | 630 | 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 | 1.8 | — | 2.4 | V | $I_f=20\text{mA}$ |
| Reverse Current | I_R | — | — | 10 | μA | $V_R=5\text{V}$ |

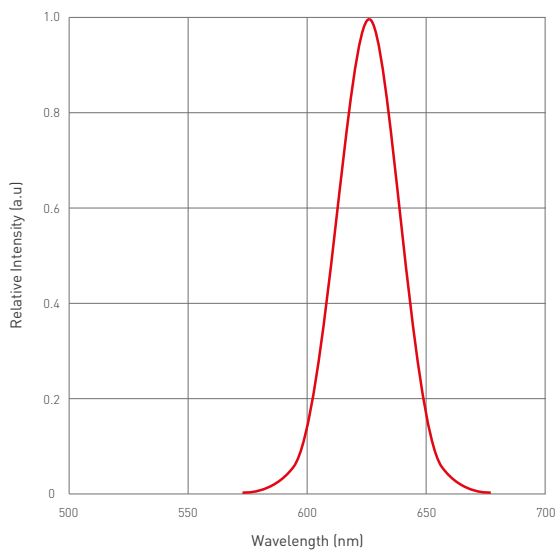
Note:

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

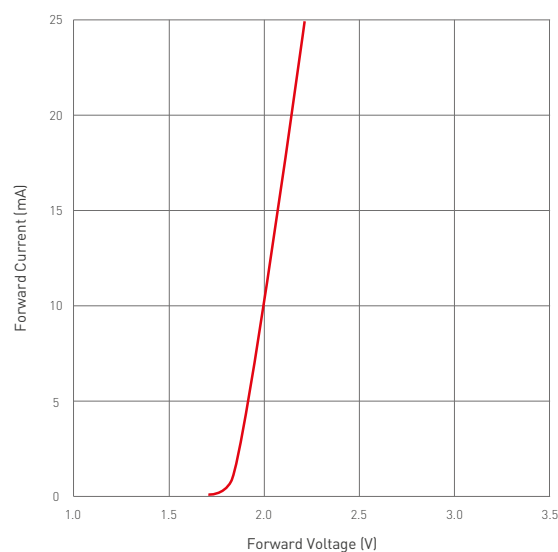
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

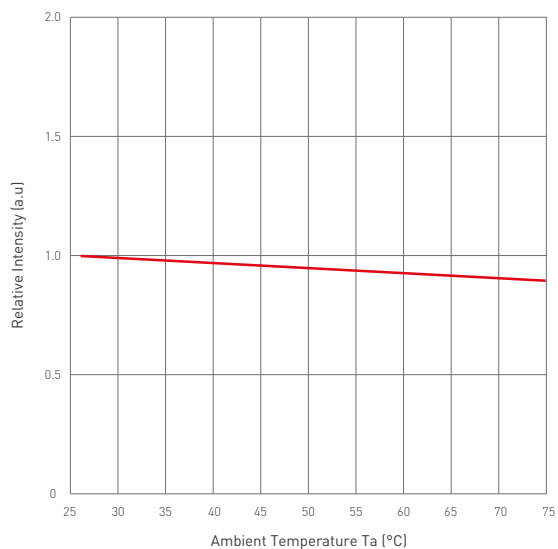
Relative Intensity VS Wavelength



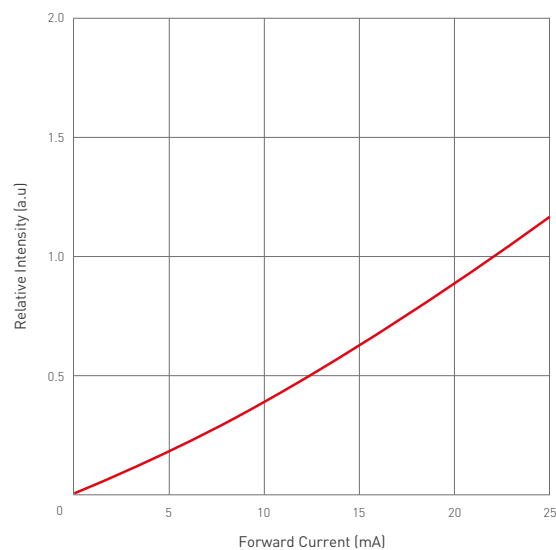
Forward Current VS Forward Voltage



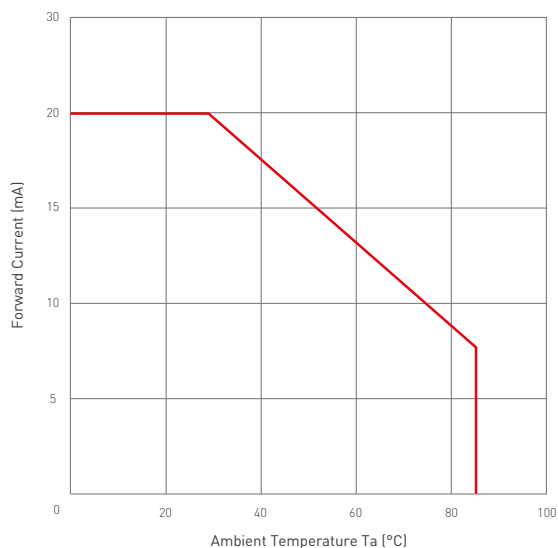
Relative Intensity VS Ambient Temp



Forward Current VS Relative Intensity



Forward Current VS Ambient Temp



Radiation Characteristics

