

# ВЫВОДНОЙ СВЕТОДИОД ЦИЛИНДРИЧЕСКИЙ ARL-5923URUGW/2L

## 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 are 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.

## DEVICE SELECTION GUIDE

LED Part No.	CHIP		Lens Color
	Material	Emitted Color	
ARL-5923URUGW/2L	AlGaInP	Red	Diffused
	InGaN	Green	



5 mm



DIFFUSED



Red/Green



### USAGE NOTES:

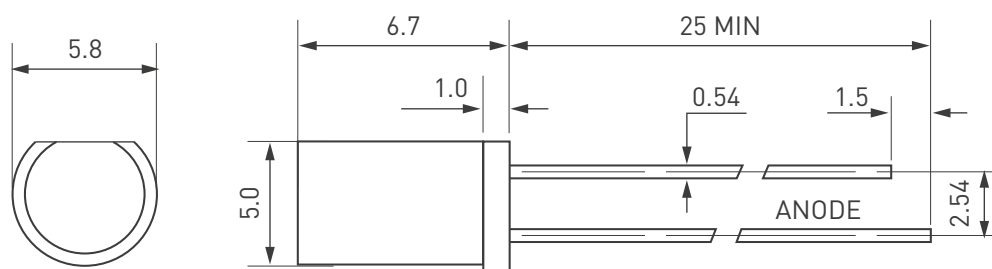
Surge will damage the LED.

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	°C
Storage Temperature	$T_{stg}$	-40... +100	°C
Soldering Heat (5s)	$T_{sol}$	260	°C

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

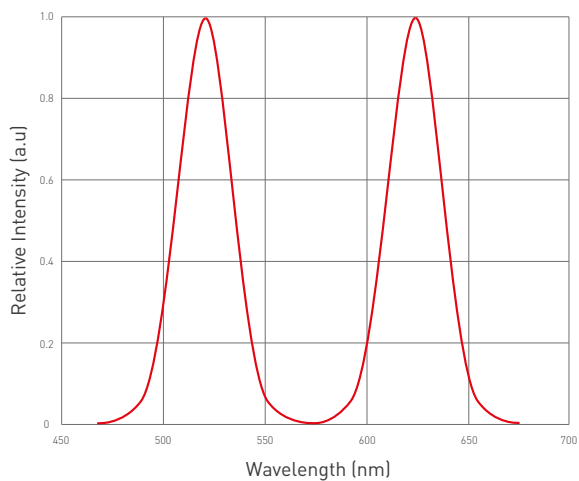
Parameter	Symbol	Device	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	Red	50	—	100	mcd	$I_f=20\text{mA}$
		Green	400	—	600		
Viewing Angle	$2\theta_{1/2}$	Red	30	—	40	Deg	(Note 1)
		Green					
Peak Emission Wavelength	$\lambda_P$	Red	620	630	635	nm	$I_f=20\text{mA}$
		Green	520	525	530		
Spectral Line Half-Width	$\Delta\lambda$	Red	15	20	25	nm	$I_f=20\text{mA}$
		Green	30	35	40		
Forward Voltage	$V_F$	Red	1.9	—	2.3	V	$I_f=20\text{mA}$
		Green	2.9		3.5		
Reverse Current	$I_R$	Red	—	—	10	$\mu\text{A}$	$V_R=5\text{V}$
		Green					

### Note:

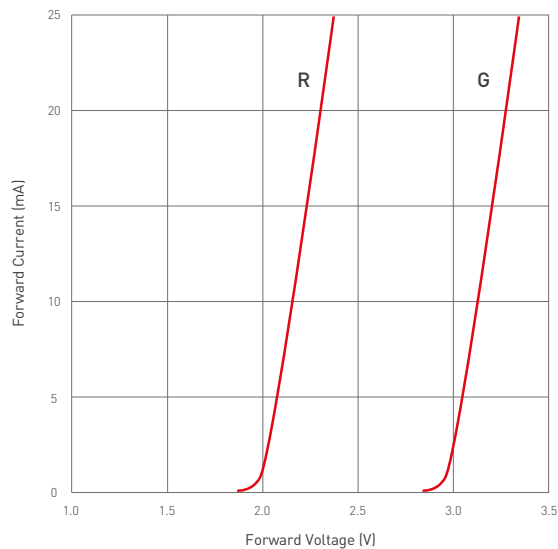
1.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

# TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

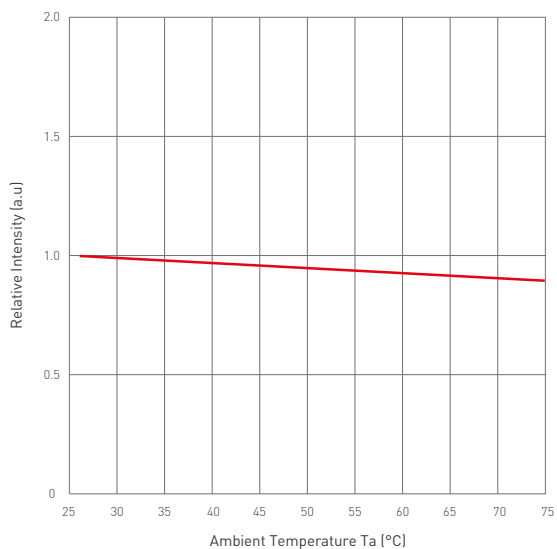
Relative Intensity VS Wavelength



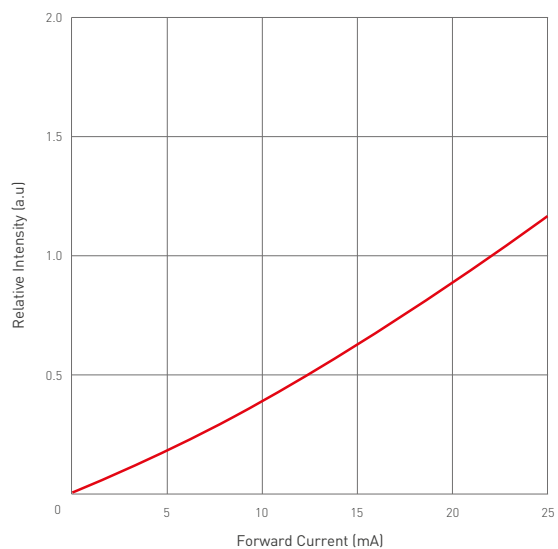
Forward Current VS Forward Voltage



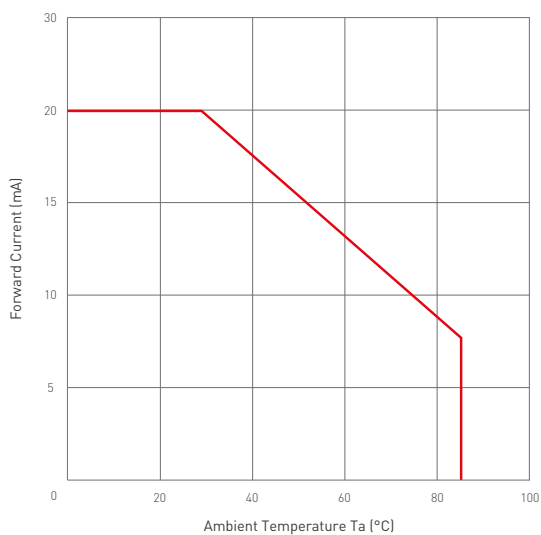
Relative Intensity VS Ambient Temp



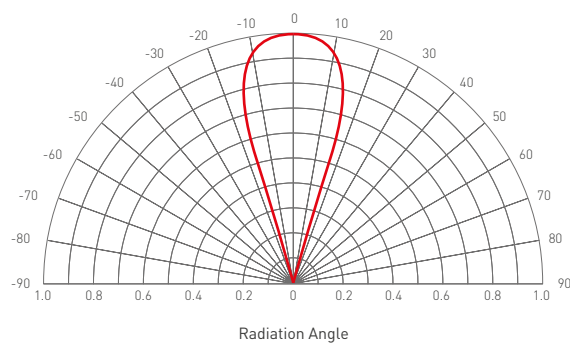
Forward Current VS Relative Intensity



Forward Current VS Ambient Temp



Radiation Characteristics



## NOTES

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