ARL-5413EGC/3L

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 is 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

USAGE NOTES

- Surge will damage the LED
- When using LED, it must use a protective resistor in series with DC current about 20mA

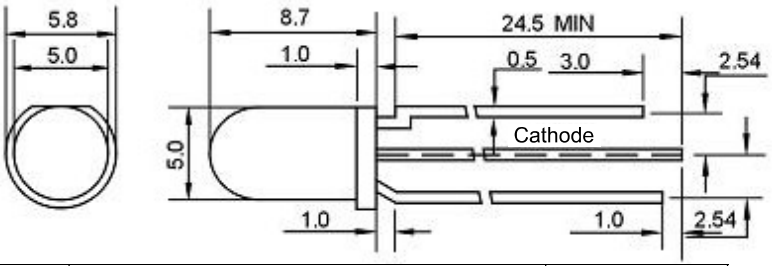
Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5413EGC/3L	GaAsP/GaP	Red	Water clear
	GaAsP/GaP	Green	

PACKAGE 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	I_{FPM}	100	mA
Forward Current	I_{FM}	30	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	140	mW
Operating Temperature	Topr	-40 ~+80	°C
Storage Temperature	Tstg	-40 ~+100	°C
Soldering Heat (5s)	Tsol	260	°C

Electro-Optical Characteristics (Ta=25 °C)

Parameter	Symbol	Device	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Red	---	200	400	mcd	IF=20mA
		Green					
Viewing Angle	$2\theta_{1/2}$	Red	---	30	---	Deg	(Note 1)
		Green					
Peak Emission Wavelength	λp	Red	620	630	635	nm	IF=20mA
		Green	565	570	575		

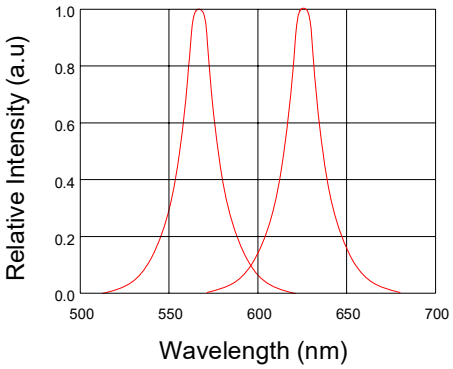
Spectral Line Half-Width	△λ	Red Green	15	20	25	nm	IF=20mA
Forward Voltage	V_F	Red Green	1.8	---	2.4	V	IF=20mA
Reverse Current	I_R	Red Green	---	---	10	μA	VR=5V

Note:

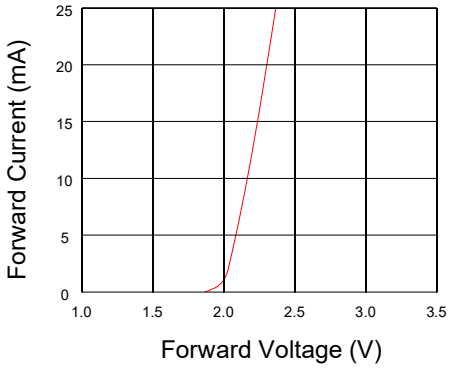
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

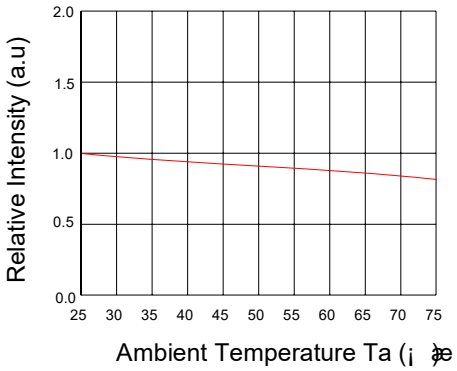
Relative Intensity VS. Wavelength



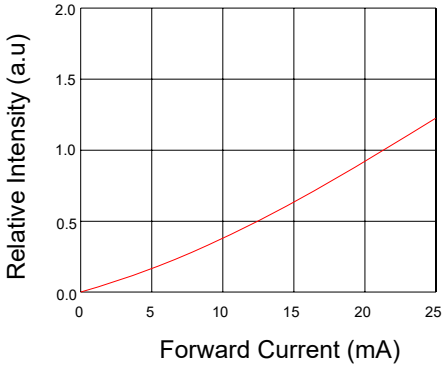
Forward Current VS.Forward Voltage



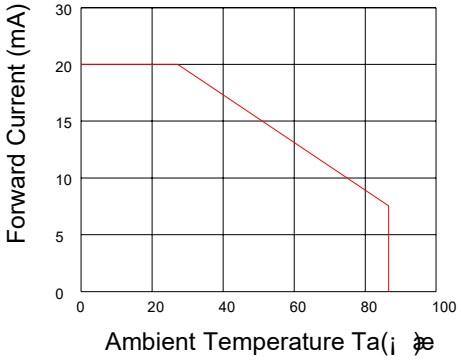
Relative Intensity VS. Ambient Temp



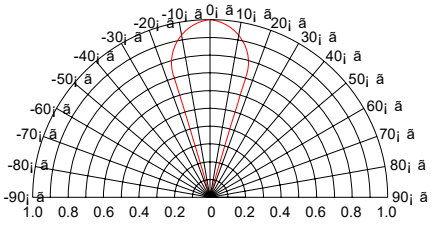
Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics



Note:

- Above specification may be changed without notice. Factory will reserve authority on material change for above specification.
- When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Factory assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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