

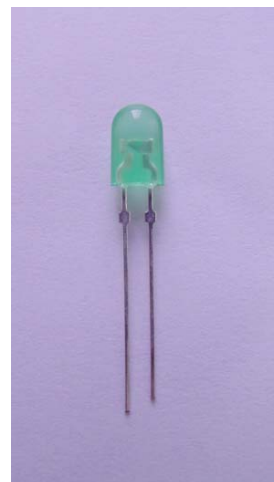


Technical Data Sheet

3474/G1DB-ALNA/X/MS

Features

- High luminous intensity output
- Oval Shape
- Well defined spatial radiation
- Wide viewing angle ($2\theta_{1/2}$) : $100^\circ / 50^\circ$
- ESD-withstand voltage: up to 4KV
- The product itself will remain within RoHS compliant version
- UV resistant epoxy



Descriptions

- This precision optical performance oval LED is specifically designed for passenger information signs
- This lamp has matched radiation patterns with red and blue mixing color applications
- Superior performance in outdoor environment

Applications

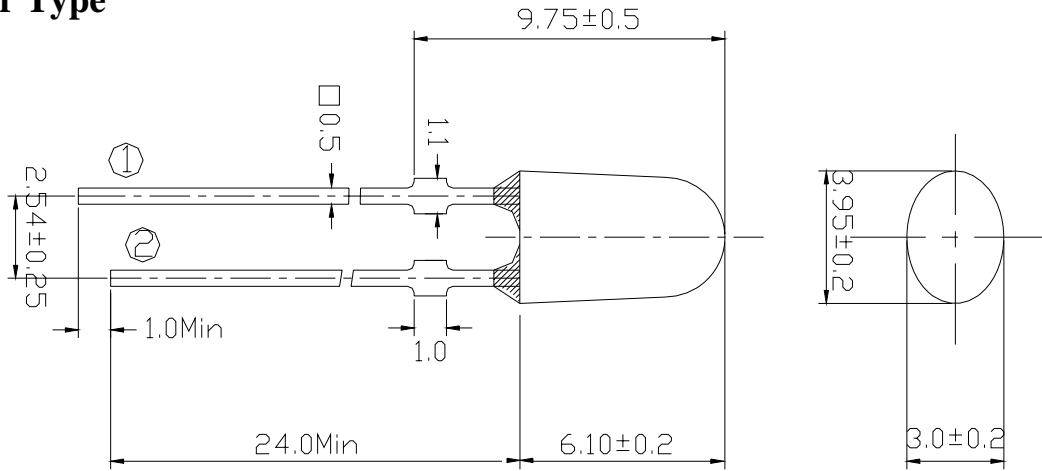
- Single or Dual Color Graphic Signs
- Message boards
- Variable message signs (VMS)
- Commercial outdoor advertising

Device Selection Guide

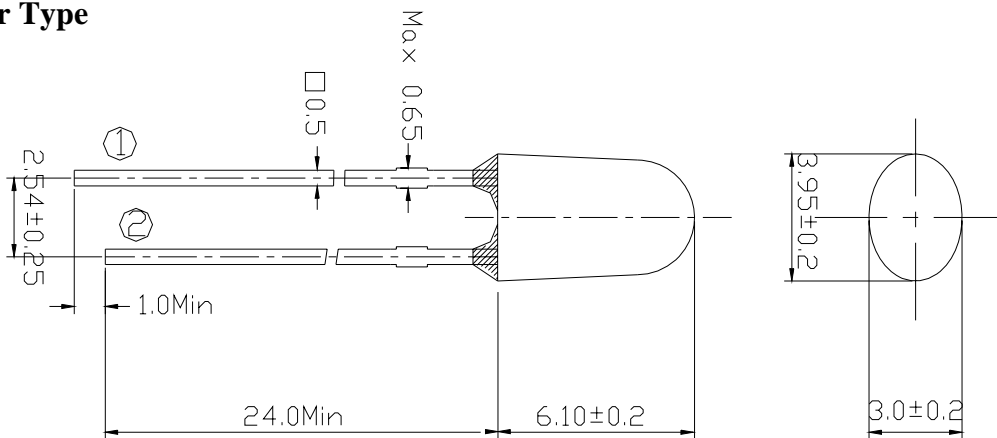
LED Part No.	Chip Material	Emitted Color	Lens Color	Stopper
3474/G1DB-ALNA/MS	InGaN	Super Green	Green Diffused	No
3474/G1DB-ALNA/P/MS				Yes

Package Dimensions

Stopper Type

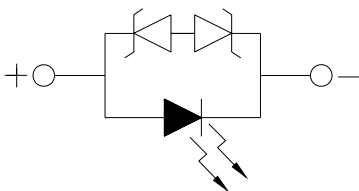


No Stopper Type



① Anode

② Cathode



Notes:

- All 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.



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Absolute Maximum Rating ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	30	mA
Pulse Forward Current (Duty 1/10@ 1KHz)	I_{FP}	100	mA
Operating Temperature	T_{opr}	-40 ~ +85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40 ~ +100	$^{\circ}\text{C}$
Electrostatic Discharge	ESD	4K	V
Soldering Temperature	T_{sol}	260 \pm 5	$^{\circ}\text{C}$
Power Dissipation	P_d	100	mW
Reverse Voltage	V_R	5	V
Zener Reverse Current	I_z	100	mA

Notes: Soldering time \leq 5 seconds.

Electro-Optical Characteristics ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I_V	1425	2000	2850	mcd	$I_F=20\text{mA}$
Viewing Angle	$2\theta_{1/2}$	--	X:100 Y:50	--	deg	
Peak Wavelength	λ_p	--	518	--	nm	
Dominant Wavelength	λ_d	--	525	--		
Spectrum Half width	$\Delta\lambda$	--	35	--		
Forward Voltage	V_F	--	3.4	3.6	V	
Reverse Current	I_R	--	--	50	μA	
Zener Reverse Voltage	V_Z	5.2	--	--	V	$I_z=5\text{mA}$

Rank Combination ($I_F=20\text{mA}$)

Rank	L	M	N
Luminous Intensity	1425~1800	1800~2250	2250~2850

*Measurement Uncertainty of Luminous Intensity: $\pm 15\%$

Unit:mcd

Rank	0	1	2	3
Forward Voltage	2.8~3.0	3.0~3.2	3.2~3.4	3.4~3.6

*Measurement Uncertainty of Forward Voltage: $\pm 0.1\text{V}$

Unit:V

Rank	1	2
Dominant Wavelength	524~528	528~532

*Measurement Uncertainty of Dominant Wavelength $\pm 1.0\text{nm}$

Unit:nm

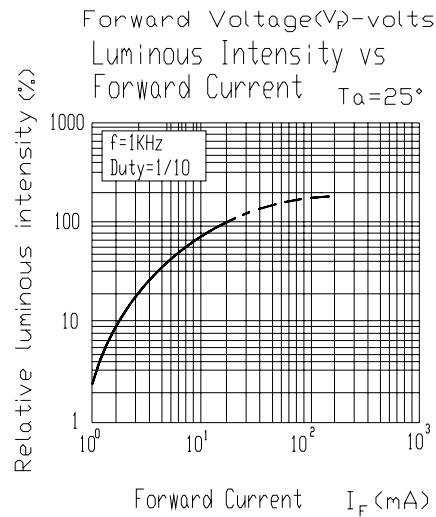
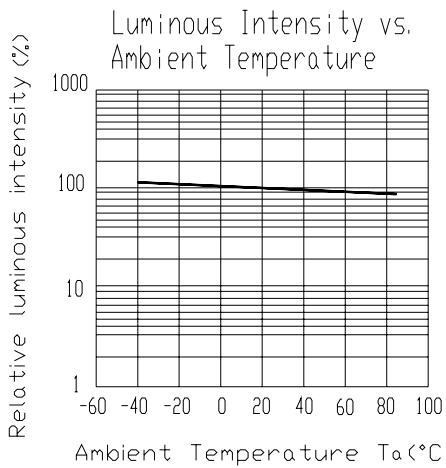
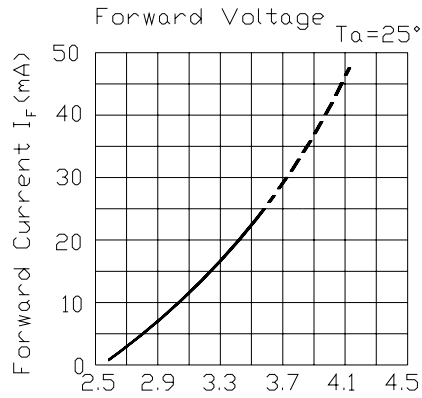
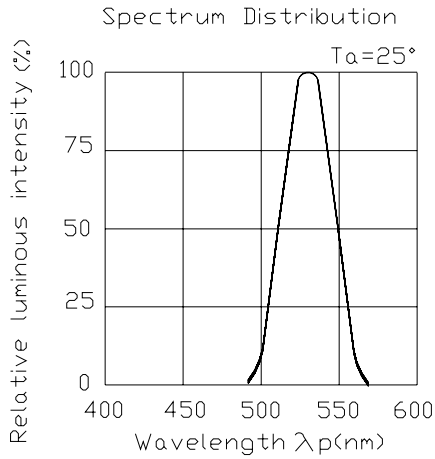
*The quantity ratio of the ranks is decided by EVERLIGHT.



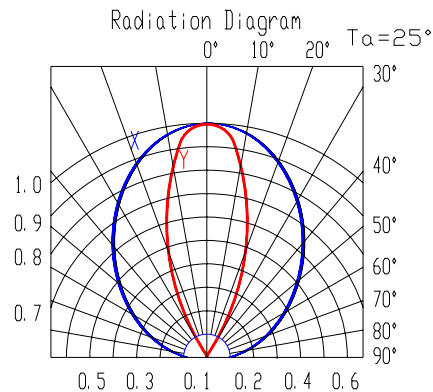
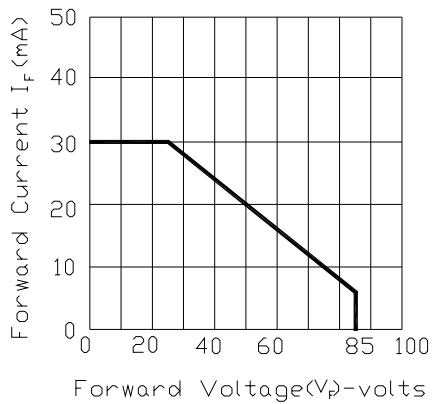
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Typical Electro-Optical Characteristics Curves



Forward Current Derating Curve





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Packing Quantity Specification

1.1000PCS/1Bag , 5Bags/1Box

2.10Boxes/1Carton

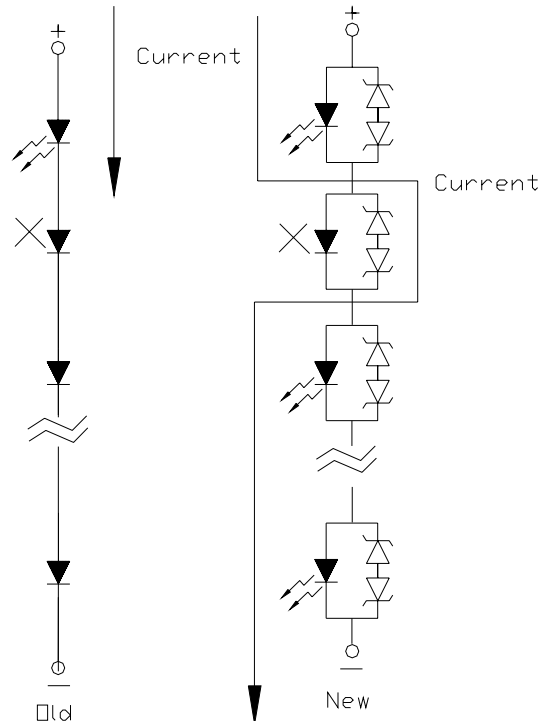
Label Form Specification

CPN:	
P/N:	
3474/G1DB-ALNA/X/MS	
QTY :	CAT:
	HUE:
LOT NO :	REF:
MADE IN TAIWAN	

CPN: Customer's Production Number
P/N : Production Number
QTY: Packing Quantity
CAT: Ranks of Luminous Intensity and Forward Voltage
HUE: Ranks of Dominant Wavelength
REF: Reference
LOT No: Lot Number
MADE IN TAIWAN: Production Place

Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT 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.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.
4. Below the zener reference voltage V_z , all the current flows through LED and as the voltage rises to V_z , the zener diode "breakdown." If the voltage tries to rise above V_z current flows through the zener branch to keep the voltage at exactly V_z .
5. When the LED is connected using serial circuit, if either piece of LED is no light up but current can't flow through causing others to light down. In new design, the LED is parallel with zener diode. if either piece of LED is no light up but current can flow through causing others to light up.



6. Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more than 3mm from



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solder joint to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

Recommended soldering conditions:

Hand Soldering		DIP Soldering	
Temp. at tip of iron	400°C Max. (30W Max.)	Preheat temp.	100°C Max. (60 sec Max.)
Soldering time	3 sec Max.	Bath temp.	265 Max.
Distance	3mm Min.(From solder joint to case)	Bath time.	5 sec Max.
		Distance	3mm Min.

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