

5464SUBD/MS

Features

- High luminous intensity output
- Oval Shape
- Well defined spatial radiation
- Wide viewing angle ($2\theta_{1/2}$) : $110^\circ / 40^\circ$
- UV resistant epoxy
- The product itself will remain within RoHS compliant version.



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

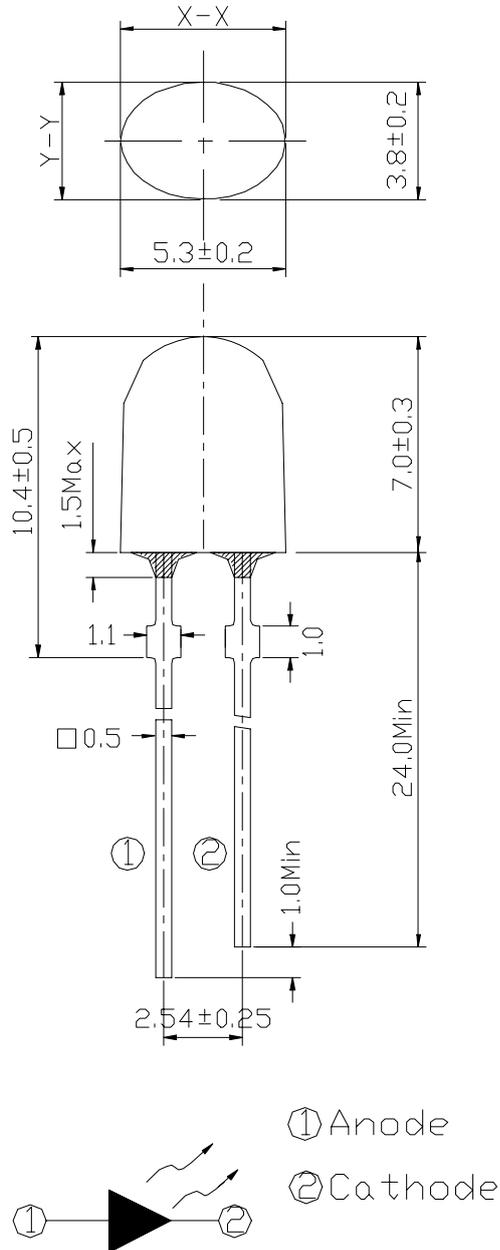
Applications

- Color Graphic Signs
- Message boards.
- Variable message signs (VMS)
- Commercial outdoor advertising.

Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
5464SUBD/MS	InGaN/SiC	Blue	Blue Diffused

Package Dimension



Notes:

- Stopper tolerance is $+0.2/-0.1$ mm .
- 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.



Technical Data Sheet

5464SUBD/MS

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	1000	V
Soldering Temperature	T_{sol}	260 \pm 5	$^{\circ}\text{C}$
Power Dissipation	P_d	130	mW
Reverse Voltage	V_R	5	V

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	285	450	715	mcd	$I_F=20\text{mA}$
Viewing Angle	$2\theta_{1/2}$	--	X:110Y:40	--	deg	
Peak Wavelength	λ_p	--	468	--	nm	
Dominant Wavelength	λ_d	460	470	480		
Spectrum Half width	$\Delta\lambda$	--	26	--		
Forward Voltage	V_F	2.8	3.5	3.8	V	
Reverse Current	I_R	--	--	50	μA	$V_R=5\text{V}$

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

Rank	D	E	F	G
Luminous Intensity	285~360	360~450	450~565	565~715

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

Unit:mcd

Rank	0	1	2	3	4
Forward Voltage	2.8~3.0	3.0~3.2	3.2~3.4	3.4~3.6	3.6~3.8

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

Unit:V

Rank	2	3	4	5	6
Dominant Wavelength	460~464	464~468	468~472	472~476	476~480

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

Unit:nm

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

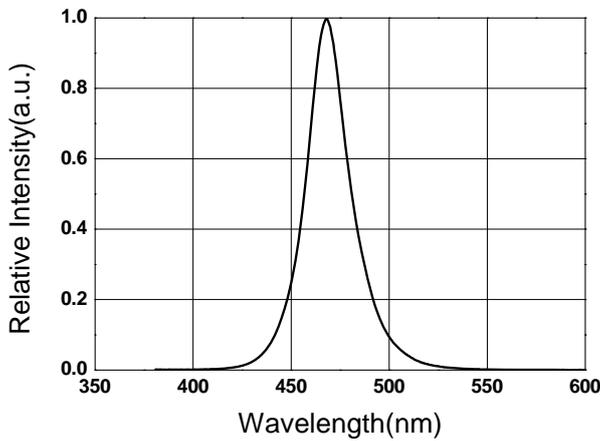


Technical Data Sheet

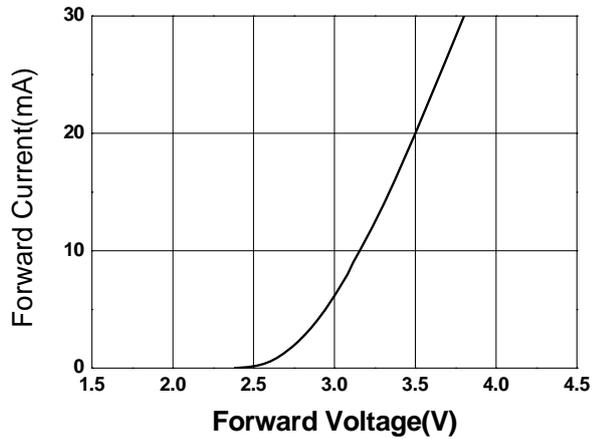
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Typical Electro-Optical Characteristics Curves

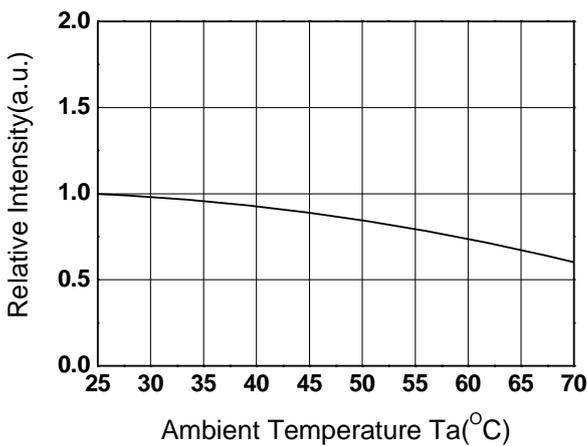
Relative Intensity vs. Wavelength



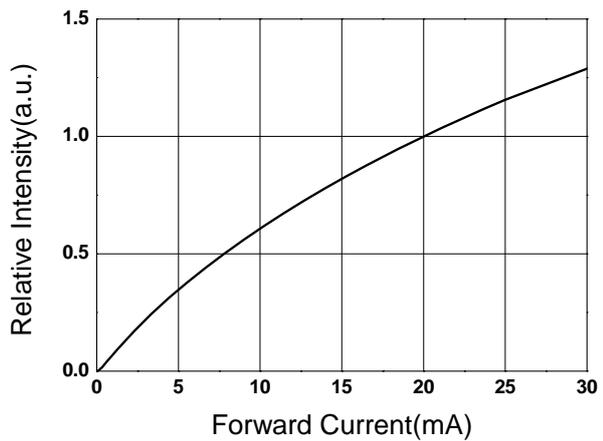
Forward Current vs. Forward Voltage



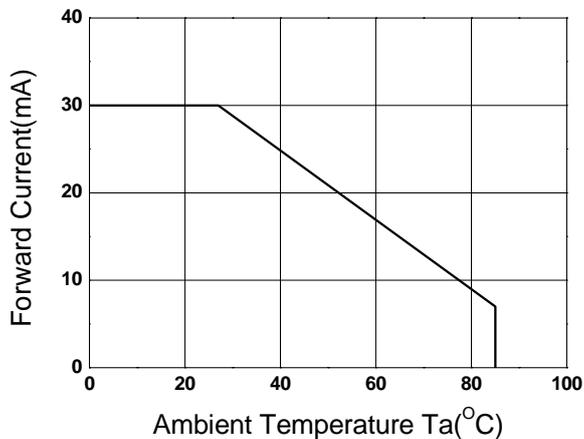
Relative Intensity vs. Ambient Temp



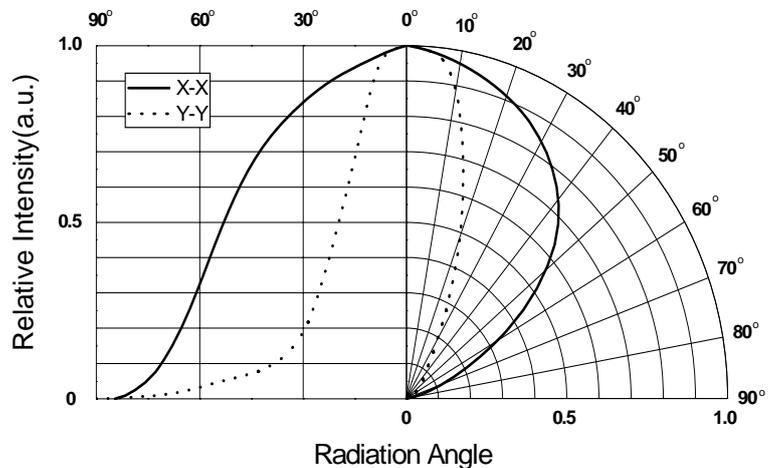
Forward Current vs. Relative Intensity



Forward Current vs. Ambient Temp.



Radiation Characteristics





Technical Data Sheet

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Packing Quantity Specification

1.500PCS/1Bag , 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification

EVERLIGHT	
CPN:	
P/N:	
	
5464SUBD/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



Technical Data Sheet

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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. Soldering Condition

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