



Technical Data Sheet

3464RGB Series

Features

- High luminous intensity output
- Oval Shape
- Well defined spatial radiation
- Wide viewing angle ($2\theta_{1/2}$) : $110^\circ / 50^\circ$
- UV resistant epoxy
- Pb free



Descriptions

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

Applications

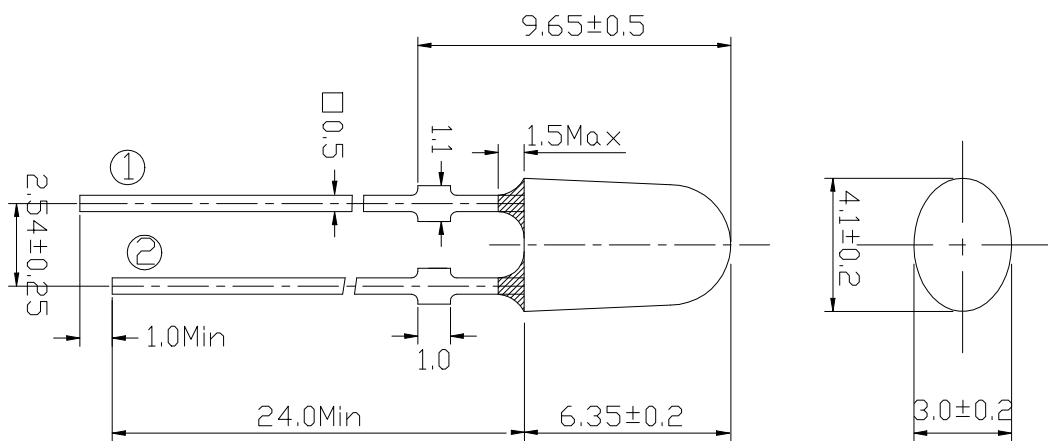
- Single or dual color graphic signs
- Message boards
- Variable message signs (VMS)
- Commercial outdoor advertising

Device Selection Guide

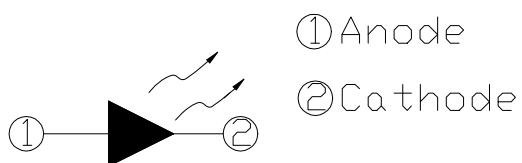
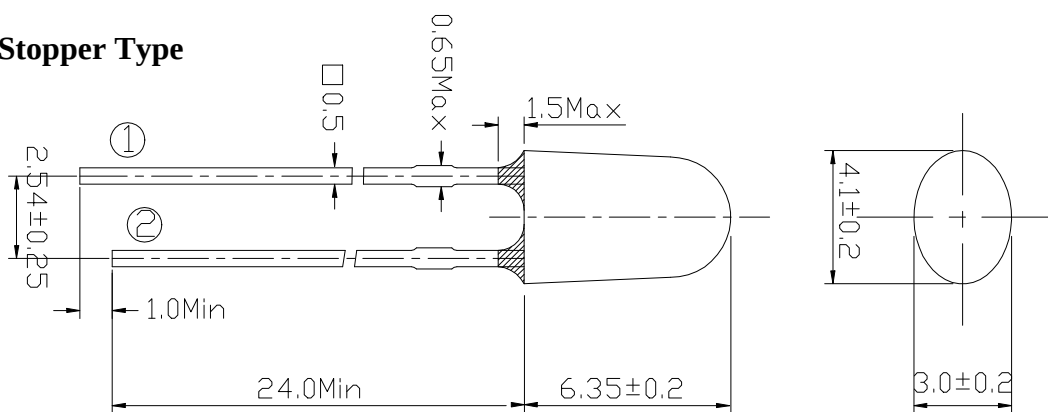
LED Part No.	Chip Material	Emitted Color	Lens Color	Stopper
3464USRD/S195/MS	AlGaInP	Super Red	Red Diffused	No
3464USRD/MS	AlGaInP	Super Red	Red Diffused	Yes
3464SUGD/S195/MS	InGaN/SiC	Super Green	Green Diffused	No
3464SUGD/MS	InGaN/SiC	Super Green	Green Diffused	Yes
3464SUBD/S195/MS	InGaN/SiC	Super Blue	Blue Diffused	No
3464SUBD/MS	InGaN/SiC	Super Blue	Blue Diffused	Yes

Package Dimensions

Stopper Type



No Stopper Type



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.

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

Parameter	Symbol	SUB/SUG	USR	Unit
Forward Current	I_F	30	50	mA
Pulse Forward Current (Duty1/10@ 1KHz)	I_{FP}	100	100	mA
Operating Temperature	T_{opr}	-40 ~ +85	-40 ~ +85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40 ~ +100	-40 ~ +100	$^{\circ}\text{C}$
Electrostatic Discharge	ESD	1000	2000	V
Soldering Temperature	T_{sol}	260 $\pm$ 5	260 $\pm$ 5	$^{\circ}\text{C}$
Power Dissipation	P_d	130	130	mW
Reverse Voltage	V_R	5	5	V

Notes: Soldering time $\leq$ 5 seconds.

Electro-Optical Characteristics (T_a=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _V				mcd	I _F =20mA
USR		380	800	1650		
SUG		600	1000	2600		
SUB		240	450	1050		
Viewing Angle	2 θ _{1/2}				deg	I _F =20mA
Major Axis			110			
Minor Axis			50			
Peak Wavelength	λ _p				nm	I _F =20mA
USR			639			
SUG			518			
SUB			468			
Dominant Wavelength	λ _d				nm	I _F =20mA
USR			631			
SUG			525			
SUB			470			
Spectrum Half width	Δ λ				nm	I _F =20mA
USR			20			
SUG			35			
SUB			26			
Forward Voltage	V _F				V	I _F =20mA
USR			2.0	2.6		
SUG			3.5	4.3		
SUB			3.5	4.3		
Reverse Current	I _R				μ A	V _R =5V
USR			---	10		
SUG			---	50		
SUB			---	50		

3464RGB Series

Intensity Rank Limits

(mcd at 20 mA)

Rank	Min.	Max.
D	285	360
E	360	450
F	450	565
G	565	715
H	715	900
J	900	1125
K	1125	1425
L	1425	1800
M	1800	2250

Tolerance for each rank limit is $\pm 15\%$.

Forward Voltage Rank Limits

(V at 20 mA)

Rank	Min.	Max.
K	1.7	1.9
L	1.9	2.1
M	2.1	2.3
N	2.3	2.5
P	2.5	2.7
Q	2.7	2.9
R	2.9	3.1
S	3.1	3.3
T	3.3	3.5
U	3.5	3.7
V	3.7	3.9
W	3.9	4.1

Tolerance for each rank limit is $\pm 0.1V$

SUG Color Rank Limits

(nm at 20 mA)

Rank	Min.	Max.
3	520.0	524.0
4	524.0	528.0
5	528.0	532.0
6	532.0	536.0
7	536.0	540.0

Tolerance for each rank limit is $\pm 1.0nm$

SUB Color Rank Limits

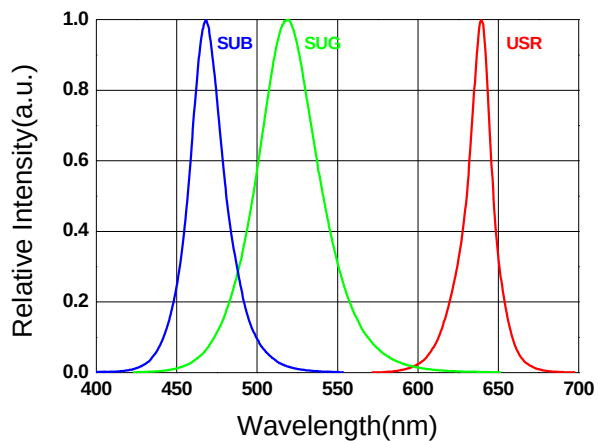
(nm at 20 mA)

Rank	Min.	Max.
2	460.0	464.0
3	464.0	468.0
4	468.0	472.0
5	472.0	476.0
6	476.0	480.0

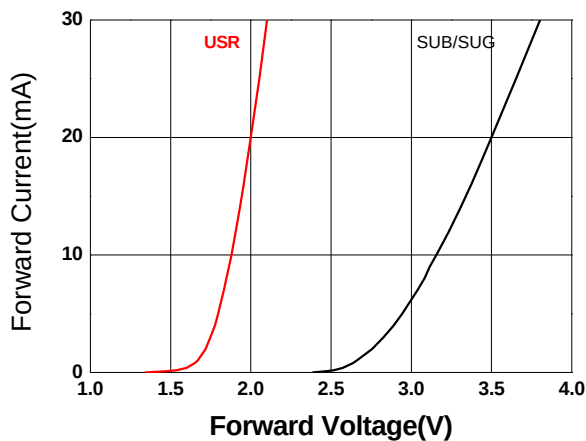
Tolerance for each rank limit is $\pm 1.0nm$

Typical Electro-Optical Characteristics Curves

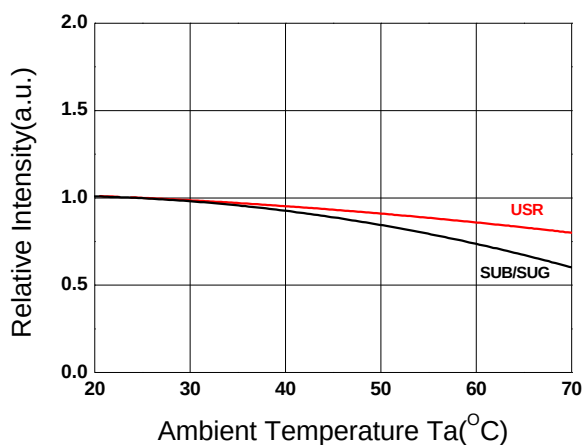
Relative Intensity vs. Wavelength



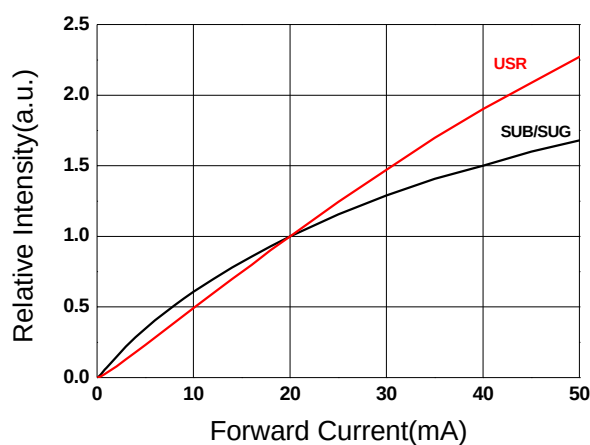
Forward Current vs. Forward Voltage



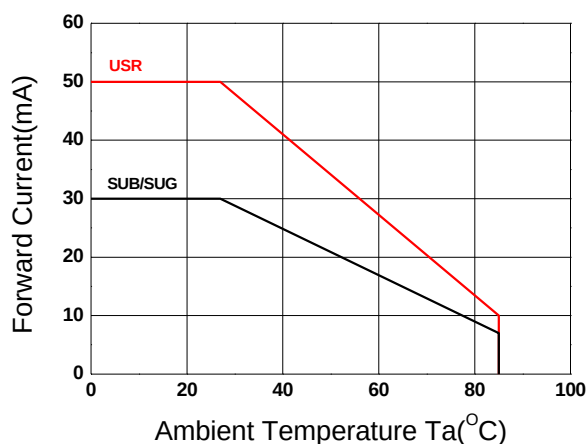
Relative Intensity vs. Ambient Temp



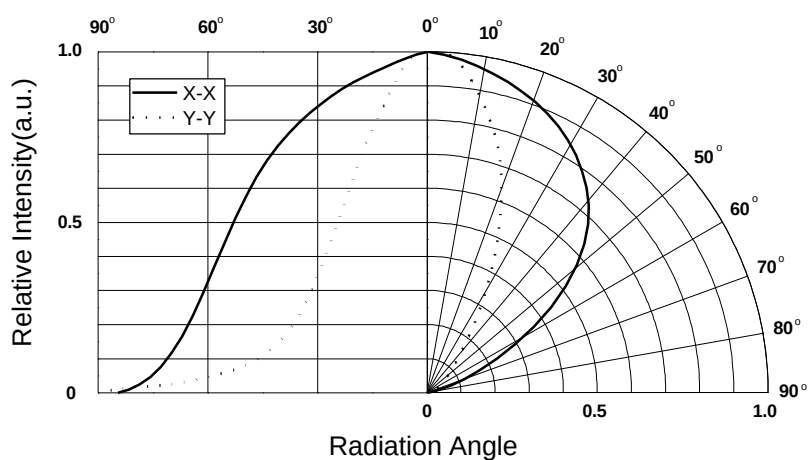
Forward Current vs. Relative Intensity



Forward Current vs. Ambient Temp.



Radiation Characteristics





3464RGB Series

Packing Quantity Specification

1.1000PCS/1Bag, 4Bags/1Box

2.10Boxes/1Carton

Label Form Specification

EVERLIGHT	
CPN:	
P/N:	
	
3464USRD/MS	
QTY :	CAT:
	HUE:
LOT NO :	REF:
	
MADE IN TAIWAN	

CPN: Customer's Production Number

P/N : Production Number

3464USRD/MS:Production name

QTY: Packing Quantity

CAT: Ranks of Luminous 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.
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