

EH-209SURYGW

Features

Two chips are matched for uniform light output, wide viewing angle

Long life-solid state reliability

I.C. compatible/Low power consumption

The product itself will remain within RoHS compliant version



Description

The Hyper Red and Green light is emitted by diodes of AlGaInP and AlGaInP respectively

Type of bipolar lamps are both White Diffused and Color Diffused while the bicolor are White Diffused

Applications

TV set

Monitor

Telephone

Computer

Health care

Device Selection Guide

Chip Materials	Emitted Color	Resin Color	Manufacturer
AlGaInp	Red/Green	White Diffused	EHAOAN

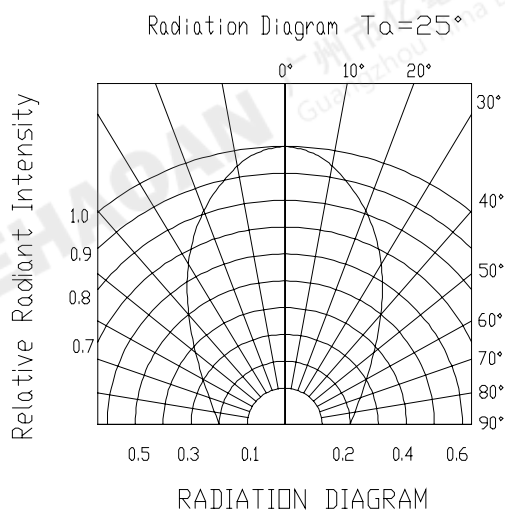
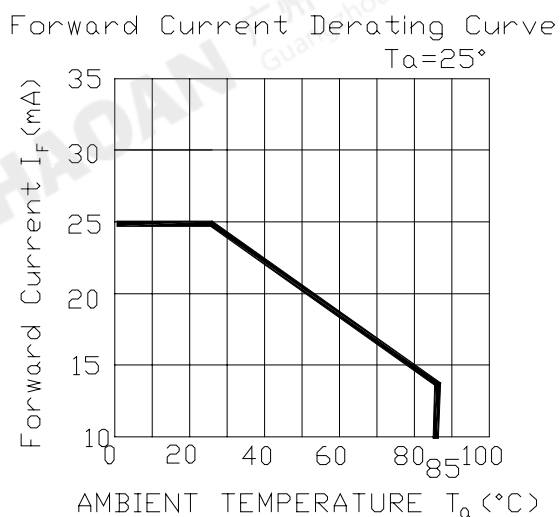
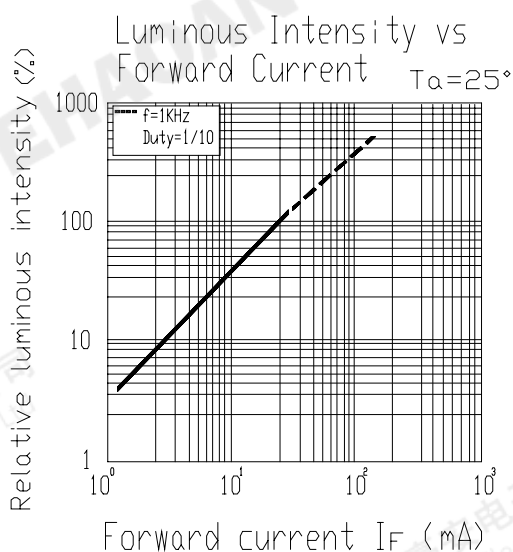
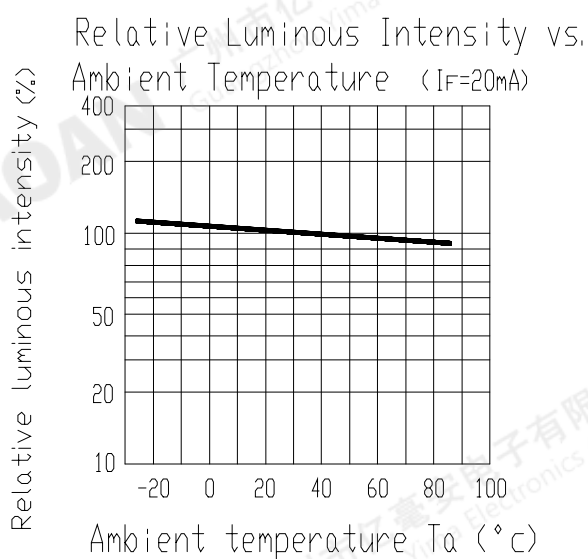
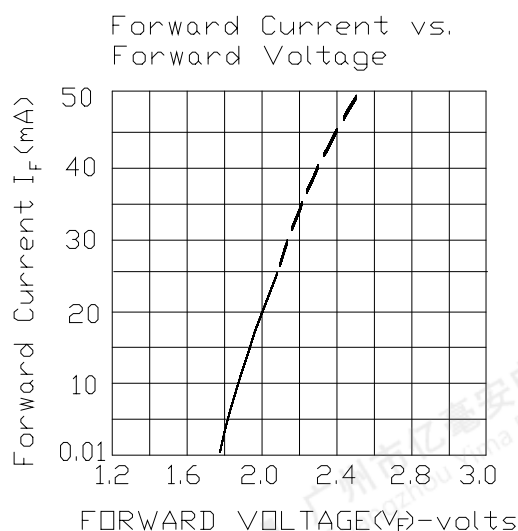
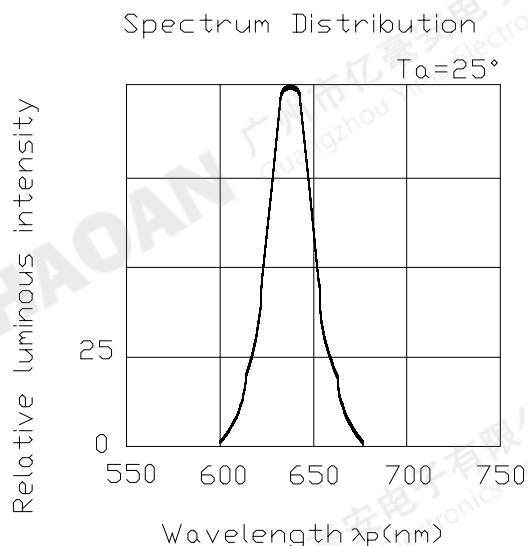
Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I _F	25	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _d	60	mW
Operating Temperature	T _{opr}	-40 ~ +85	℃
Storage Temperature	T _{stg}	-40 ~ +100	℃
Soldering Temperature	T _{sol}	260 ℃ for 5 sec.	

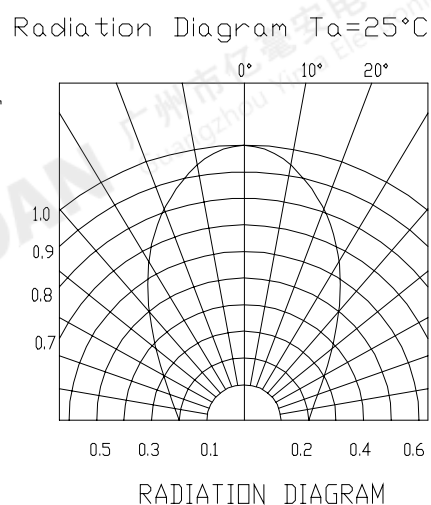
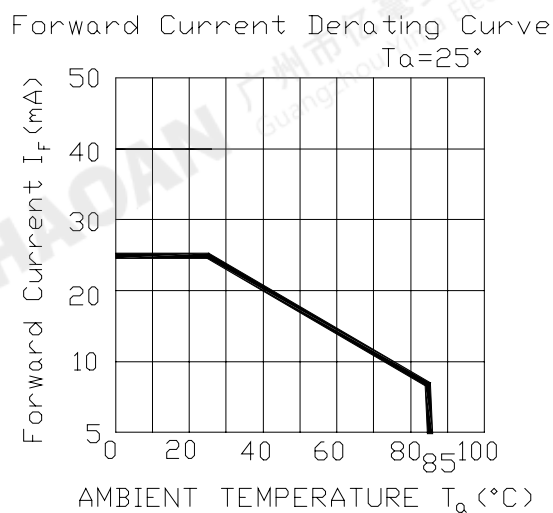
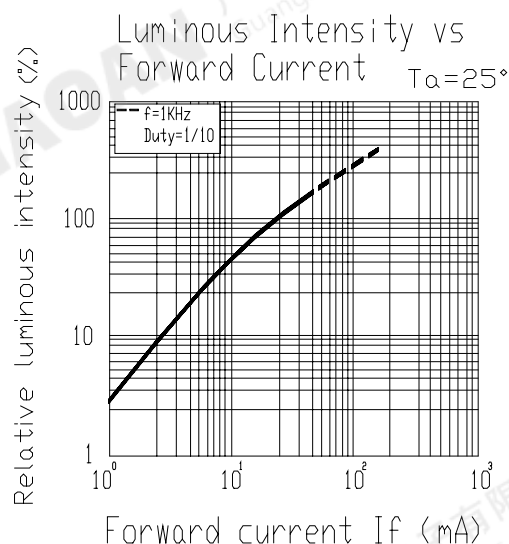
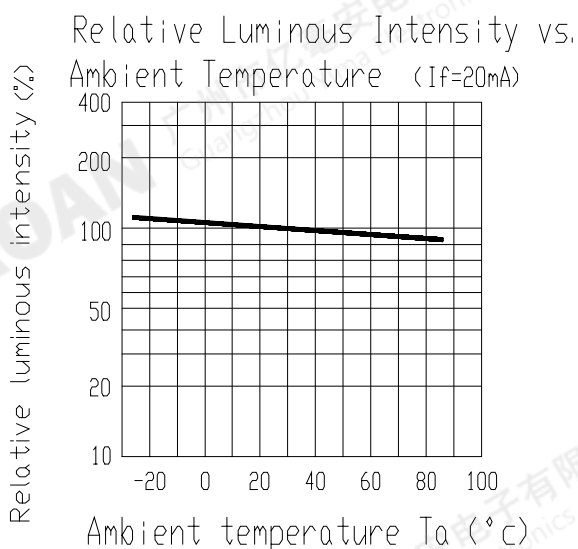
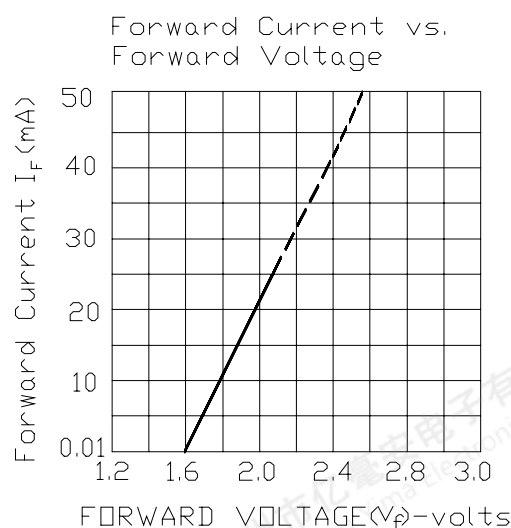
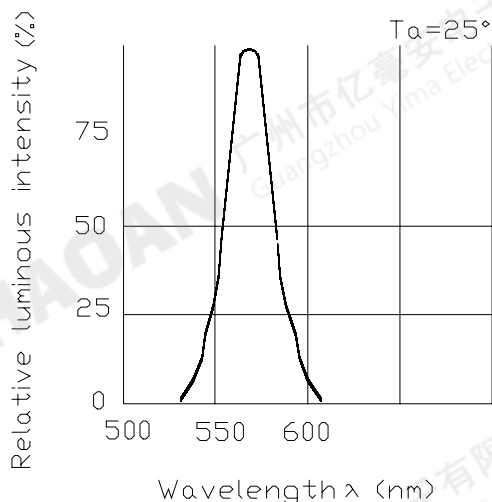
Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol		Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _v	R	25	50	----	mcd	IF=20mA
		G	10	20	----		
Viewing Angle	2θ1/2		-----	80	-----	deg	IF=20mA
Peak Wavelength	λ _p	R	----	632	----	nm	IF=20mA
		G	----	575	----		
Dominant Wavelength	λ _d	R	----	624	----	nm	IF=20mA
		G	----	573	----		
Spectrum Radiation Bandwidth	Δλ		-----	20	-----	nm	IF=20mA
Forward Voltage	V _F		----	2.0	2.4	V	IF=20mA
Reverse Current	I _R		-----	-----	10	μA	VR=5V

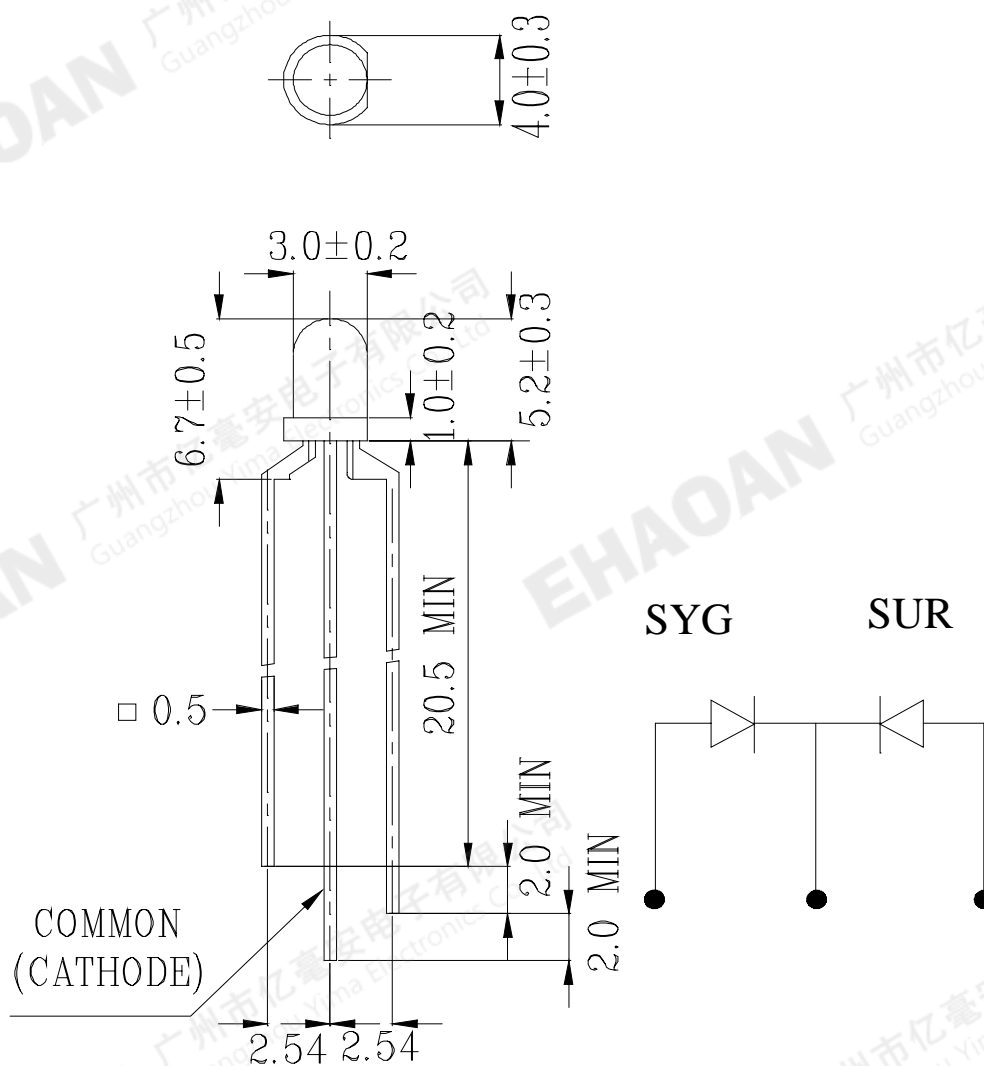
Typical Electro-Optical Characteristics Curves:SUR



Typical Electro-Optical Characteristics Curves:SYG



Package Dimension



Note:

- 1.All dimensions are in millimeters
- 2.The height of flange must be less than 2.5mm(0.059").
- 3.Without special declared, the tolerance is ± 0.25 mm.

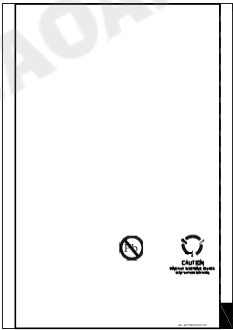
Moisture Resistant Packing Materials/標籤標識



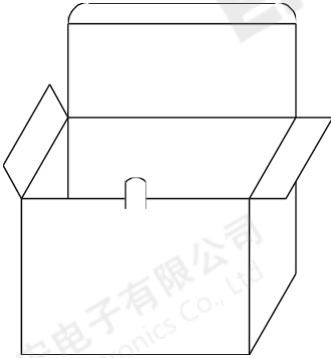
CAT: Ranks
HUE: Peak Wavelength
REF: Reference
QTY: Packing Quantity
LOT No: Lot Number

Packing Specification

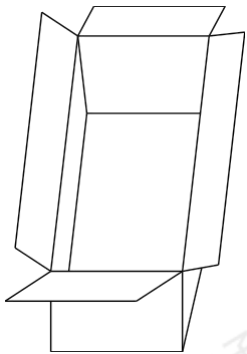
■ Anti-electrostatic bag



■ Inner Carton



■ Outside Carton



Packing Quantity

1. 500 PCS/1 Bag, 4 Bags/1 Inner Carton
2. 10 Inner Cartons/1 Outside Carton

LED MOUNTING METHOD

1.The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead- forming may be required to insure the lead pitch matches the hole pitch.

Refer to the figure below for proper lead forming procedures.(fig.1)

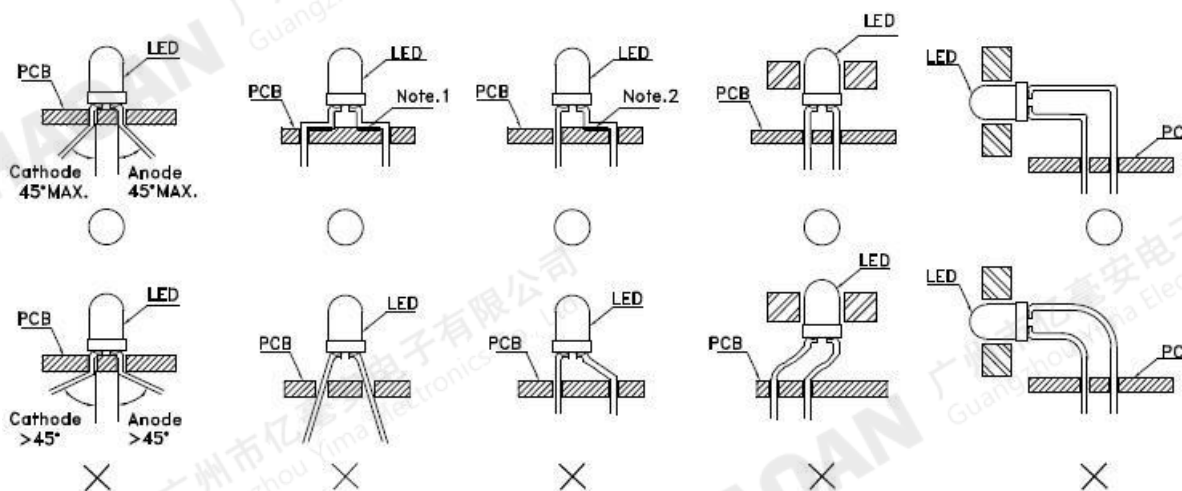


Figure 1

“o” Correct mounting method, “x” Incorrect mounting method , Note 1- 2 : Do not route PCB Trace in the contact area between the leadframe and the PCB to prevent short- circuit.

2. When soldering wire to the LED, use individual heat- shrink tubing to insulate the exposed leads to prevent accidental contact short-circuit (Fig. 2)

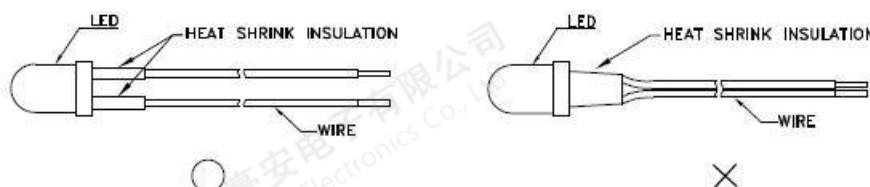


Figure 2

3.Use stand- offs (Fig. 3) or spacers (Fig. 4) to securely position the LED above the PCB.

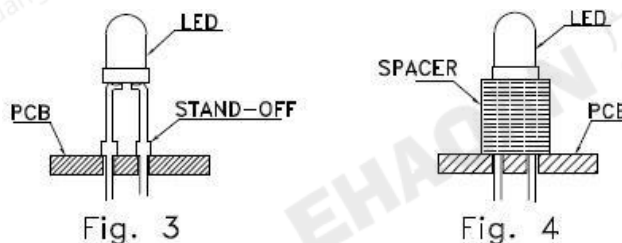


Fig. 3

Fig. 4

LEAD FORMING PROCEDURES

1. Maintain a minimum of 2mm clearance between the base of the LED lens and the first lead bend (Fig. 5 and Fig. 6).

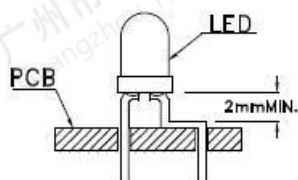


Fig. 5

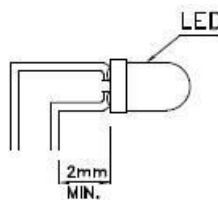


Fig. 6

2. Lead forming or bending must be performed before soldering, never during or after soldering.

3. Do not stress the LED lens during lead-forming in order to fractures in the lens epoxy and damage the internal structures.

4. During lead forming, use tools or jigs to hold the leads securely so that the bending force will not be transmitted to the LED lens and its internal structures. Do not perform lead forming once the component has been mounted onto the PCB (Fig. 7).

5. Do not bend the leads more than twice (Fig. 8)

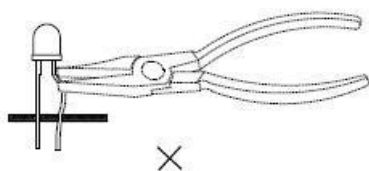


Fig. 7

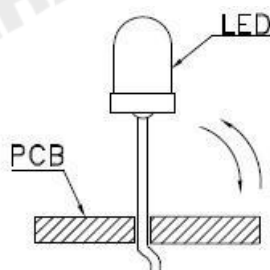


Fig. 8

6. After soldering or other high-temperature assembly, allow the LED to cool down to 50 °C before applying force (Fig. 9). In general, avoid placing excess force on the LED to avoid damage. For any questions please consult with LIGHT representative for proper handling procedures

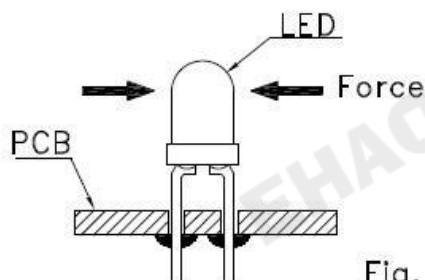


Fig. 9