



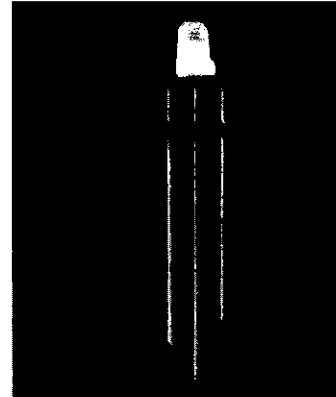
Technical Data Sheet

3.0mm Multi-Color Round Type LED Lamps

209-3SURSYGW/S530-A3

■ Features :

- Two chips are matched for uniform light output, wide viewing angle
- Long life-solid state reliability
- I.C. compatible/Low power consumption



■ Descriptions :

- The 209-3 LED lamps contain two integral chips and is available as both bicolor and bipolar types.
- The Hyper Red and Super Yellow 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

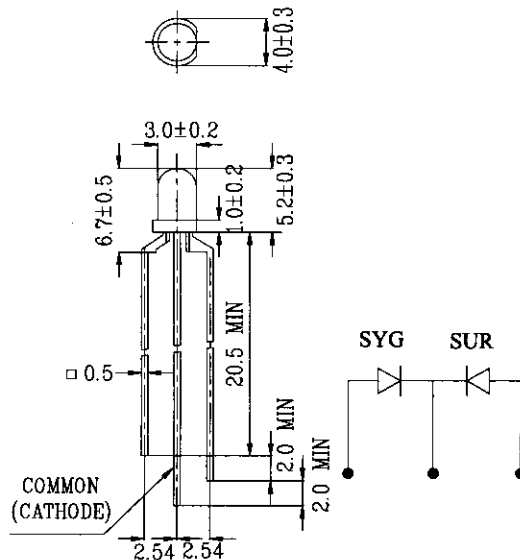
PART NO.	Chip		Lens Color
	Material	Emitted Color	
209-3SURSYGW/S530-A3	AlGaInP	Hyper Red	White Diffused
	AlGaInP	Super Yellow Green	

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Package Dimensions



Notes: 1. All dimensions are in millimetres

2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.

3. Tolerances unless Dimension ±0.25mm.

The Hyper Red and Super Yellow Green

Parameter	Symbol	Rating		Unit
Current	IF	SUR/S530	25	mA
		SYG/S530	25	
Operating Temperature	Topr	-40 to +85		°C
Storage Temperature	Tstg	-40 to +100		°C
Soldering Temperature	Tsol	260 ± 5		°C
Electrostatic Discharge	ESD	2000		V
Power Dissipation	Pd	SUR/S530	60	mW
		SYG/S530	60	
Peak Forward Current	IF(Peak)	SUR/S530	160	mA
		SYG/S530	160	
Reverse Voltage	VR	5		V

Note: *1:IFP Conditions --Pulse Width ≤ 1msec and Duty ≤ 1/10.

*2:Soldering time ≤ 5 seconds.



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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv SUR/S530	25	50	/	mcd	IF= 20 mA
	SYG/S530	10	20	/		
Viewing Angle	2θ 1/2	/	80	/	deg	IF= 20 mA
Peak Wavelength	λp SUR/S530	/	632	/	nm	IF= 20 mA
	SYG/S530	/	575	/		
Dominant Wavelength	λd SUR/S530	/	624	/	nm	IF= 20 mA
	SYG/S530	/	573	/		
Spectrum Radiation Bandwidth	Δλ SUR/S530	/	20	/	nm	IF= 20 mA
	SYG/S530	/	20	/		
Forward Voltage	VF SUR/S530	/	2.0	2.4	V	IF= 20 mA
	SYG/S530	/	2.0	2.4		
Reverse Current	IR	/	/	10	μ A	VR= 5 V



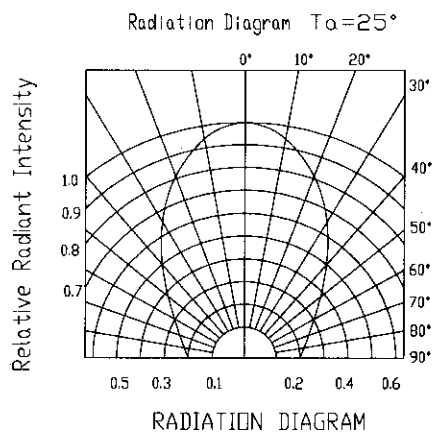
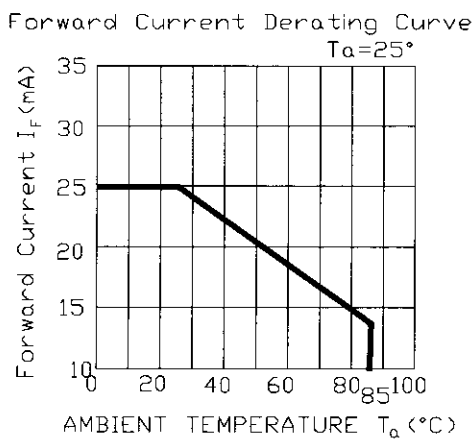
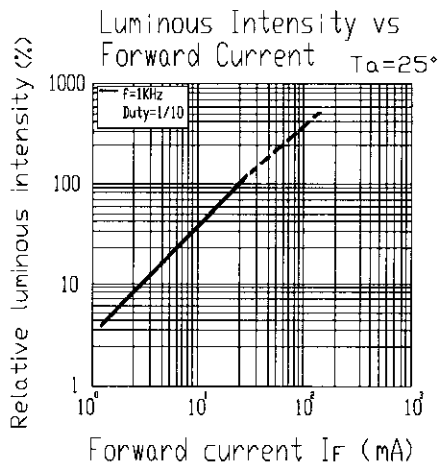
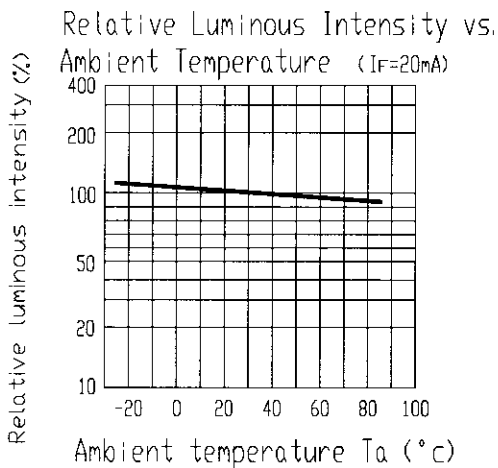
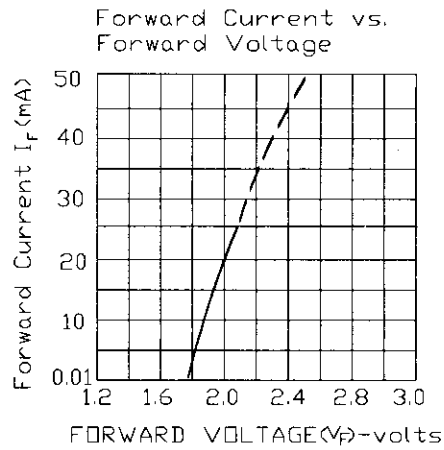
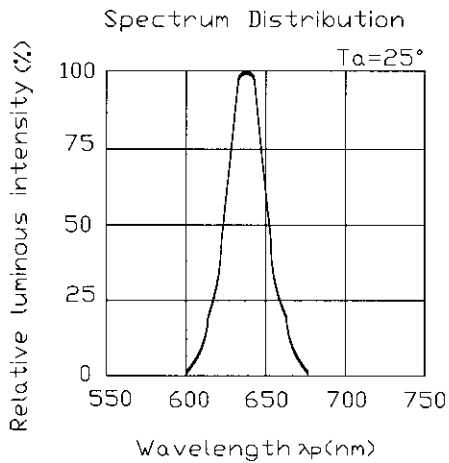
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Typical Electro-Optical Characteristic Curves:

(SUR)

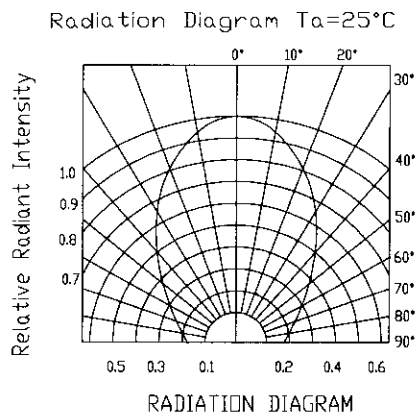
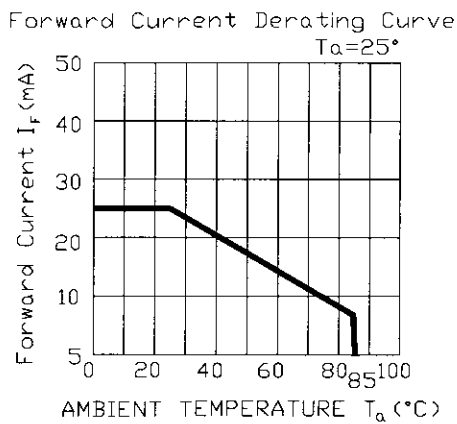
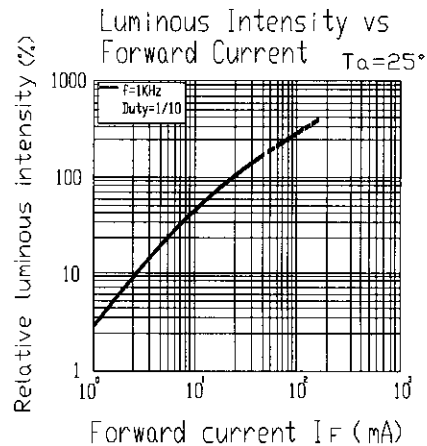
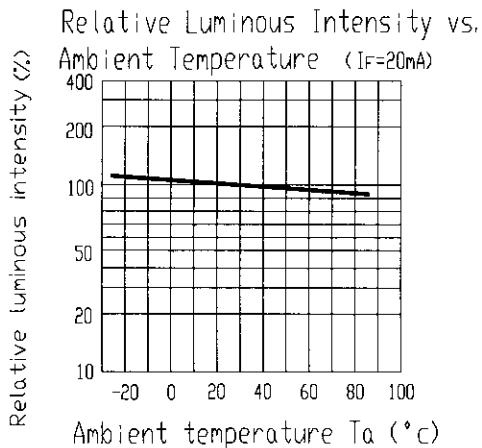
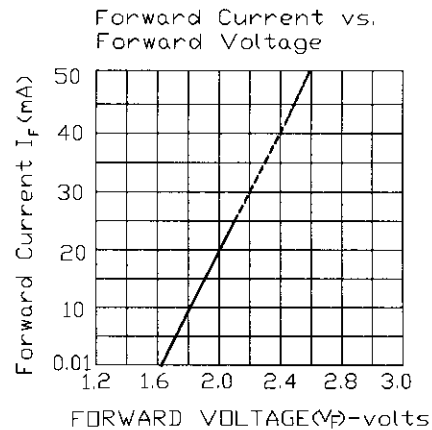
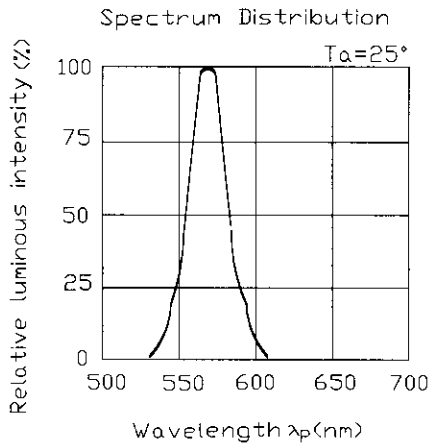


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■ Typical Electro-Optical Characteristic Curves:

(SYG)





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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100°C 15min § 5 min L : -40°C 15min	300 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min § 10 sec L : -10°C 5min	300 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -40°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25°C If = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C / 85% RH	1000 HRS	76 PCS	0/1



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Packing Quantity Specification

1.500PCS/1Bag , 6Bags/1Box

2.10Boxes/1Carton

Label Form Specification



CPN:

P/N:



209-3SURSYGW/S530-A3

QTY:



CAT:

HUE:

REF:

LOT NO: EL



MADE IN TAIWAN

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak 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.
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