EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-420-009 REV: 1.0

3.0mm Bi-Color (Multi-Color)with Common Cathode(0.1" Lead pitch) LEDs, T-1

PART NO. : 4209-3UYUGW/S530-A2 ECN : Page: 1/5

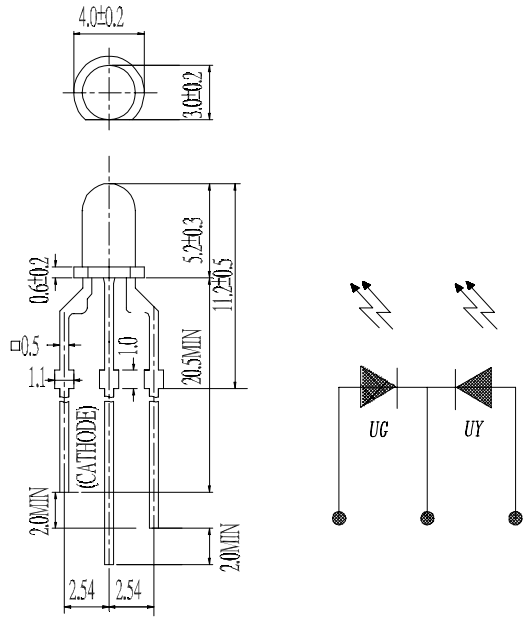
■ Features :

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

■ Descriptions :

- The 4209-3 LED lamp contain two integral chips and are available as both bicolor and bipolar types.
- The Super Yellow Light and Super Green light are emitted by diodes of AlGaInP and GaP respectively.

■ Package Dimensions:



■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Notes :

1.All dimensions are in millimeters.
2.An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
3.Tolerances unless dimension ±0.25mm

PART NO	Chip		Lens Color
	Material	Emitted Color	
4209-3UYUGW/S530-A2	AlGaInP	Super Yellow	White Diffused
	GaP	Super Green	

B90040957,9004024

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■ Absolute Maximum Ratings at Ta = 25℃

Parameter	Symbol	Rating		Unit
Forward Current	IF	UY	25	mA
		UG	25	
Operating Temperature	Topr	-40 to +85		℃
Storage Temperature	Tstg	-40 to +100		℃
Soldering Temperature	Tsol	260 ± 5		℃
Electrostatic Discharge	ESD	2000		V
Power Dissipation	Pd	UY	60	mW
		UG	100	
Peak Forward Current (Duty 1/10 @ 1KHz)	IF(Peak)	UY	160	mA
		UG	160	
Reverse Voltage	VR	5		V

■ Electronic Optical Characteristics :

Parameter	Symbol		Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	UY	40	63	／	mcd	IF= 20 mA
		UG	25	40	／		
Viewing Angle	2θ 1/2		／	50	／	deg	IF= 20 mA
Peak Wavelength	λp	UY	／	591	／	nm	IF= 20 mA
		UG	／	570	／		
Dominant Wavelength	λd	UY	／	589	／	nm	IF= 20 mA
		UG	／	571	／		
Spectrum Radiation Bandwidth	△λ	UY	／	30	／	nm	IF= 20 mA
		UG	／	30	／		
Forward Voltage	VF	UY	／	2.0	2.4	V	IF= 20 mA
		UG	1.7	2.1	2.4		
Reverse Current	IR		／	／	10	μA	VR= 5 V

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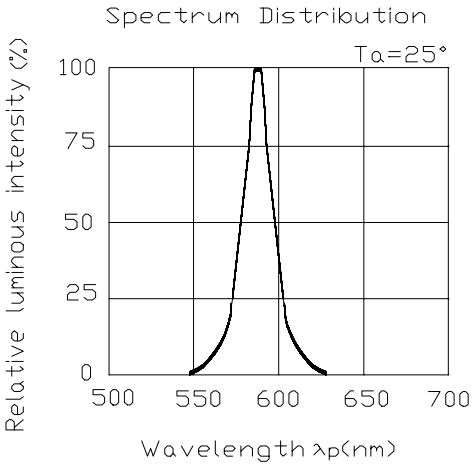
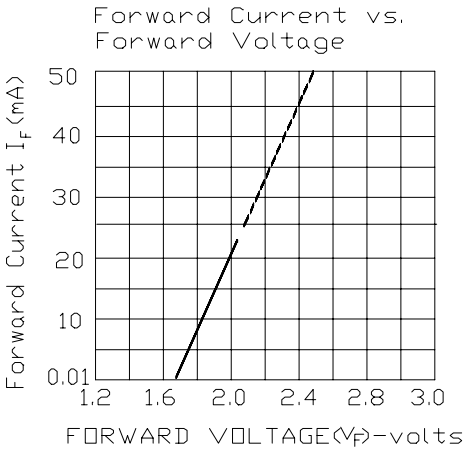
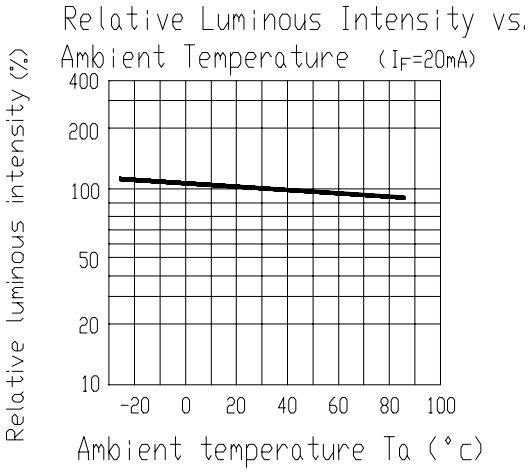
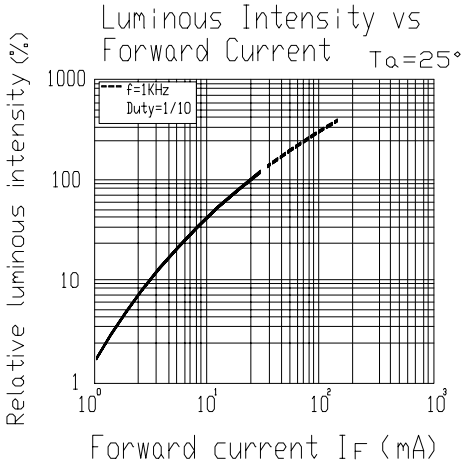
■ Typical Electro-Optical Characteristic Curves:

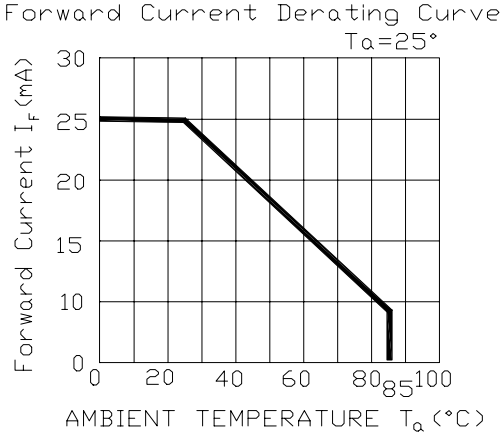
UY

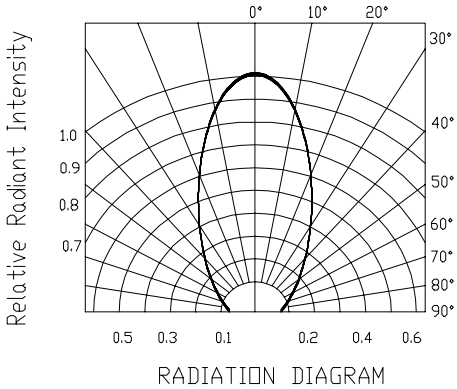












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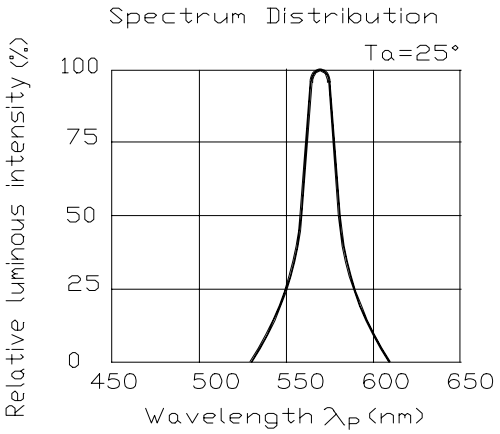
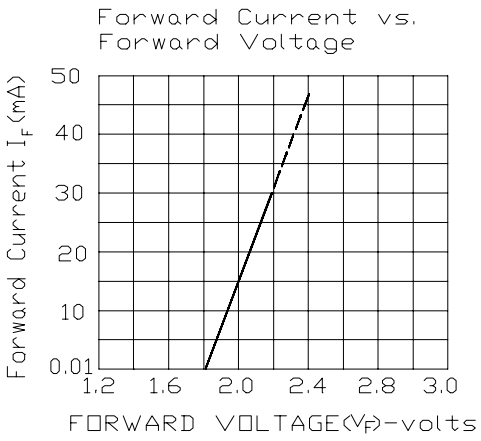
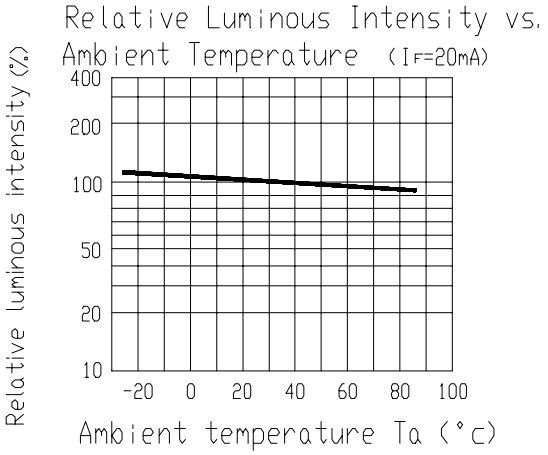
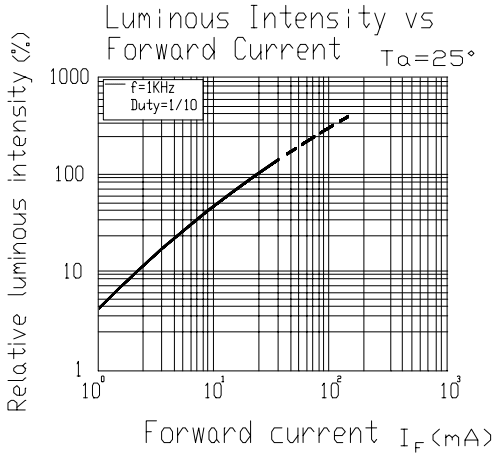
■ Typical Electro-Optical Characteristic Curves:

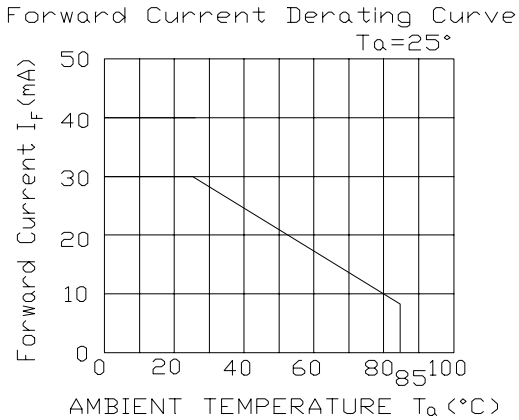
UG

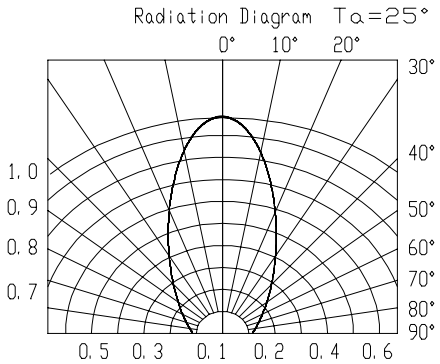












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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85℃ 30min ∫ 5 min L : -55℃ 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min ∫ 10 sec L : -10℃ 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55℃	1000 HRS	76 PCS	0/1
6	DC Operating Life	I_F=20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 PCS	0/1