



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-020-288 REV: 1.0

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

PART NO : 209-3UYSYGW/S530-A2/S880 ECN : Page: 1/5

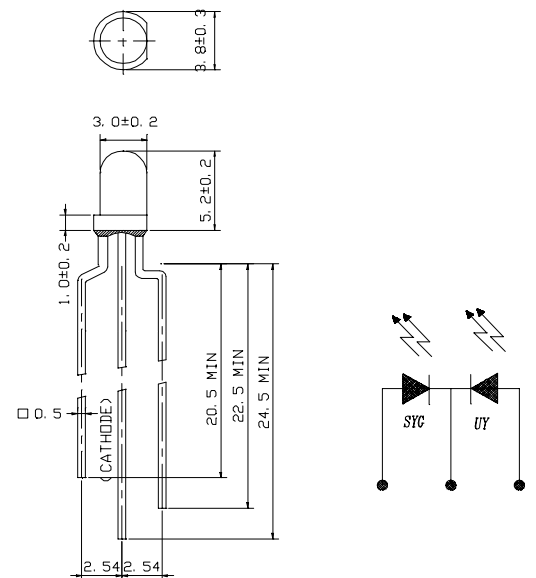
■ Features :

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

■ Descriptions :

- The 209 LED lamp contain two integral chips and is available as both bicolor and bipolar types.
- The Super Yellow and Super Yellow Green Light is emitted by diodes of AlGaInP and AlGaInP 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.

PART NO	Chip		Lens Color
	Material	Emitted Color	
209-3UYSYGW/S530-A2/S880	AlGaInP	Super Yellow	White Diffused
	AlGaInP	Super Yellow Green	

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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	If	UY 25	mA
		SYG 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	UY 60	mW
		SYG 60	
Peak Forward Current (Duty 1/10 @ 1KHZ)	If(Peak)	UY 160	mA
		SYG 160	
Reverse Voltage	Vr	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv UY	25	40	/	mcd	If= 20 mA
		SYG 10	25	/		
Viewing Angle	2θ 1/2	/	50	/	deg	If= 20 mA
Peak Wavelength	λp UY	/	591	/	nm	If= 20 mA
		SYG /	575	/		
Dominant Wavelength	λd UY	/	589	/	nm	If= 20 mA
		SYG /	573	/		
Spectrum Radiation Bandwidth	△λ UY	/	15	/	nm	If= 20 mA
		SYG /	20	/		
Forward Voltage	Vf UY	/	2.0	2.4	V	If= 20 mA
		SYG /	2.0	2.4		
Reverse Current	Ir	/	/	10	μA	Vr= 5 V



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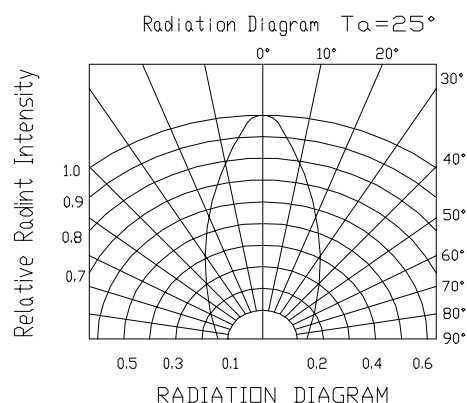
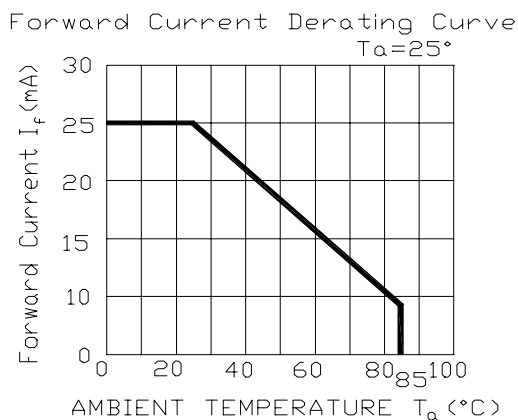
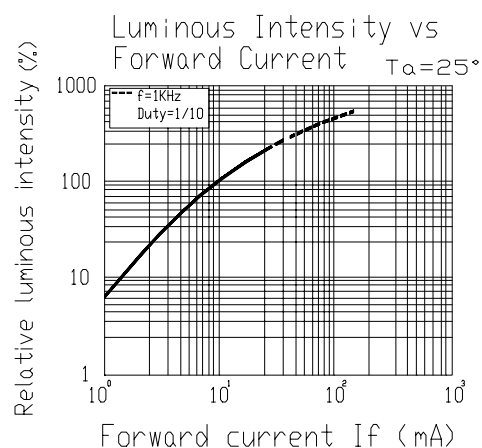
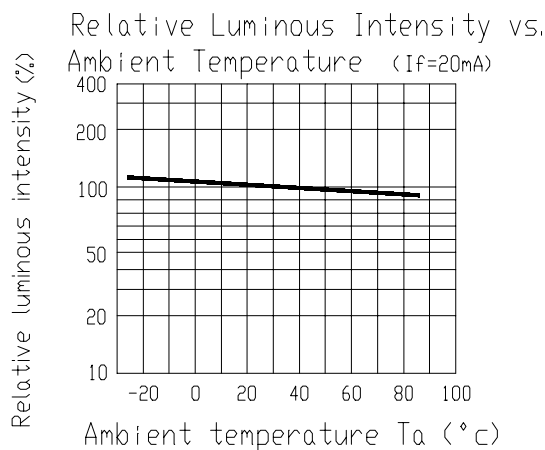
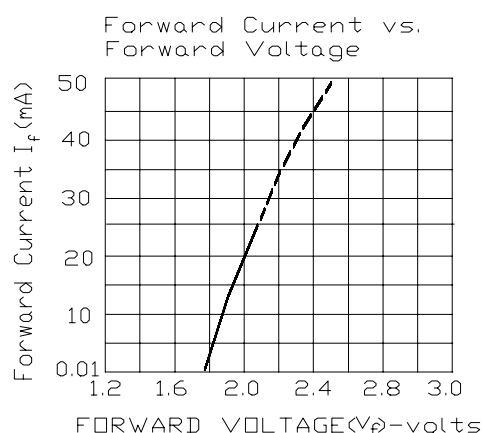
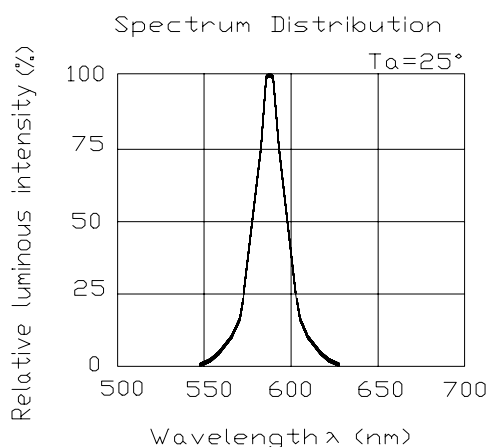
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■ Typical Electro-Optical Characteristic Curves

UY





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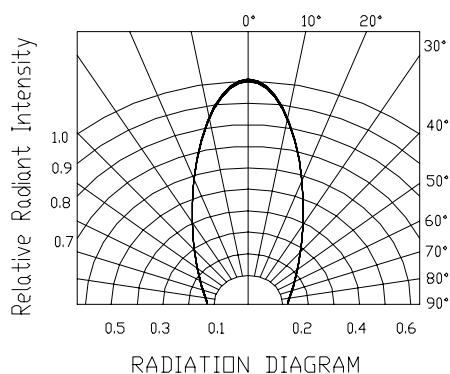
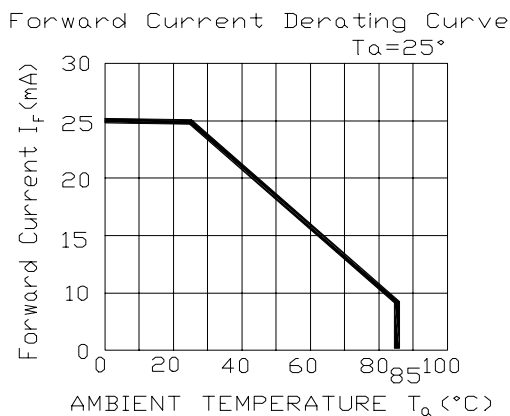
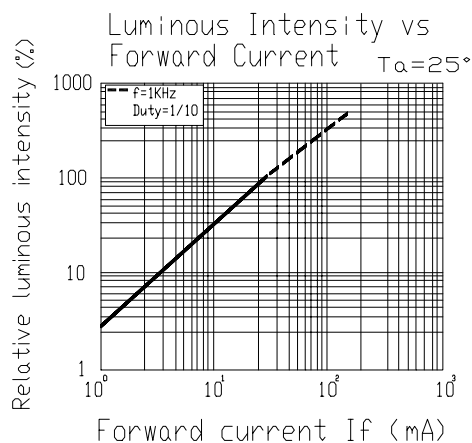
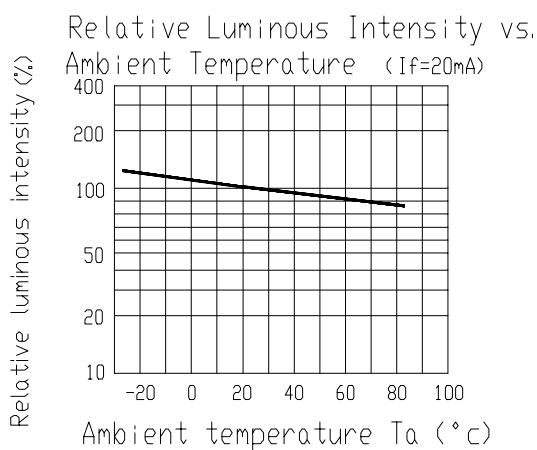
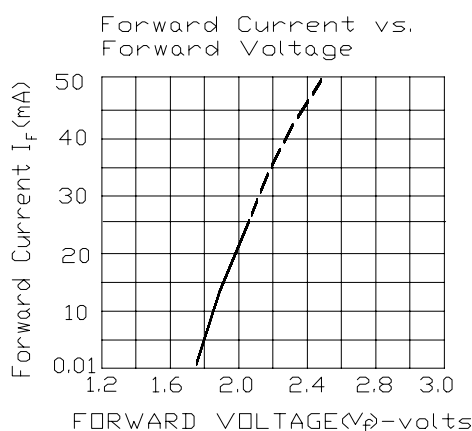
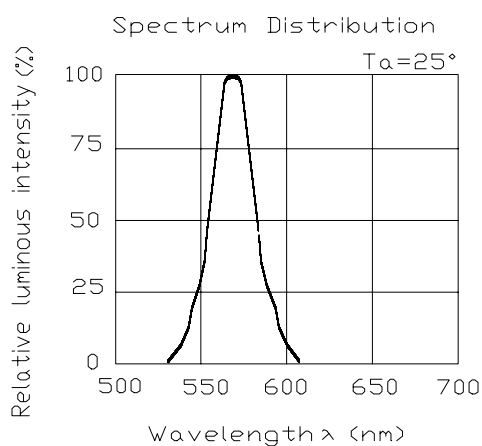
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SYG





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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	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min └ 5 min L : -55°C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min └ 10 sec L : -10°C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	If = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1