EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-020-271 REV: 1.0

3.0mm Bi-Color (Multi-Color)With common Cathode(0.05" Lead pitch) LEDs, T-1

MODEL NO : 209-2SURSYGW/S530-A2 ECN : Page: 1/5

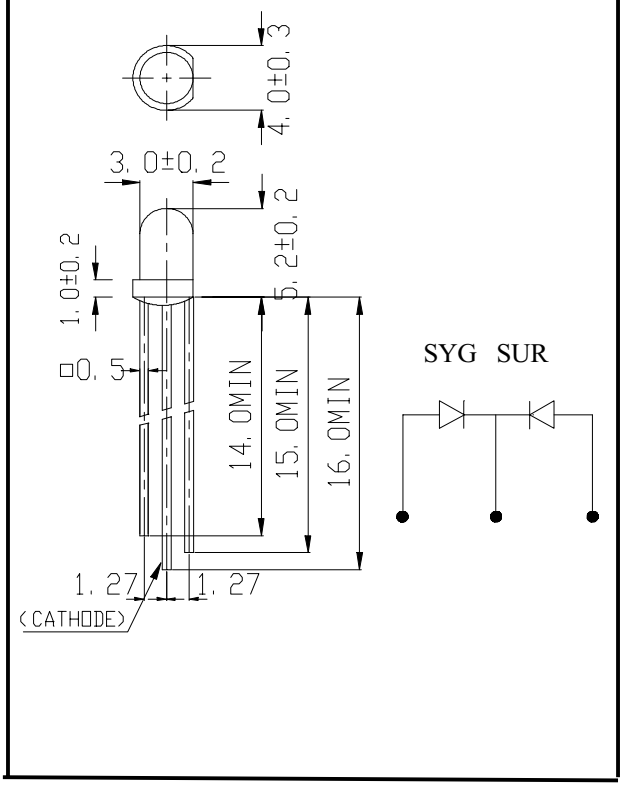
■ Features :

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

■ Description :

- The 209-2 LED lamp contain two integral chips and are available as both bicolor and bipolar types.
- The Hyper 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.

■ Package Dimension:



■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ NOTES :

1.All dimensions are millimeters.
2.An epoxy meniscus may extend about is 1.5mm(0.059") down the lead.

PART NO	Chip		Lens Color
	Material	Emitted Color	
209-2SURSYGW/S530-A2	AlGaInP	Hyper Red	White Diffused
	AlGaInP	Super Yellow Green	

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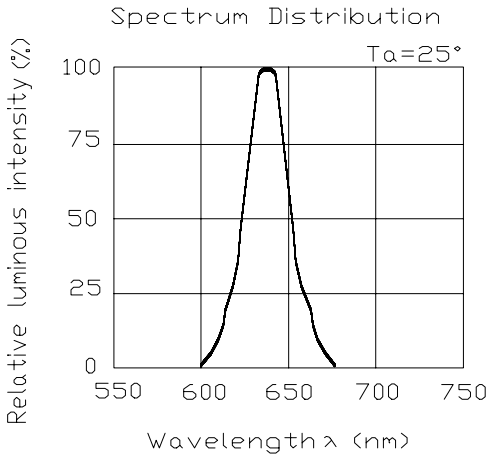
■ Absolute Maximum Ratings at Ta = 25℃

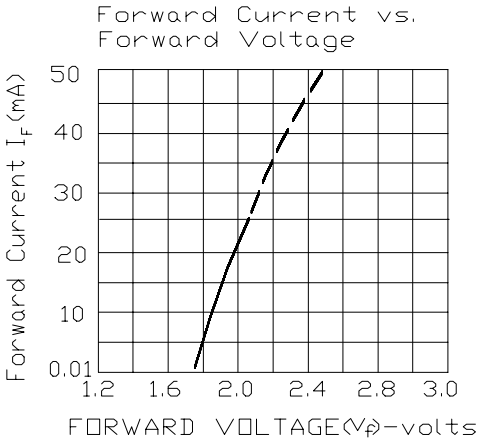
Parameter	Symbol	Rating	Unit
Forward Current	If	SUR 25	mA
		SYG 25	
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	SUR 60	mW
		SYG 60	
Peak Forward Current (Duty 1/10 @ 1KHZ)	If(Peak)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

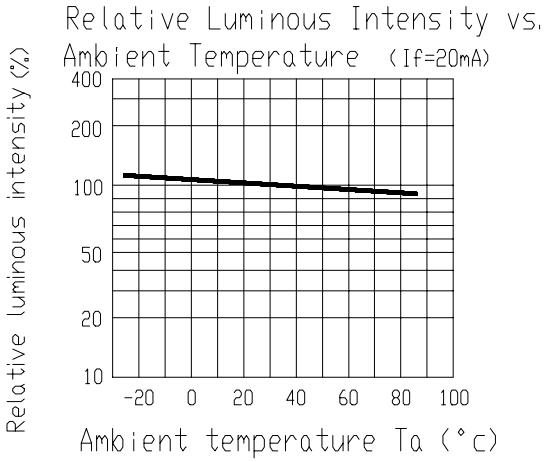
■ Electronic Optical Characteristics :

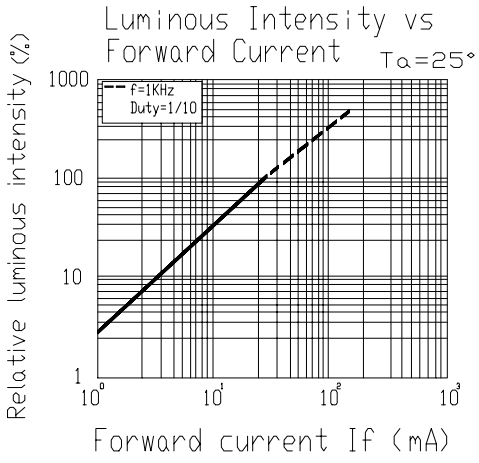
Parameter	Symbol		MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	SUR	25.00	50.00	／	mcd	If= 20 mA
		SYG	16.00	32.00	／		
Viewing Angle	2θ 1/2		／	30	／	deg	If= 20 mA
Peak Wavelength	λp	SUR	／	632	／	nm	If= 20 mA
		SYG	／	575	／		
Dominant Wavelength	λd	SUR	／	624	／	nm	If= 20 mA
		SYG	／	573	／		
Spectrum Rediation Bandwidth	△λ	SUR	／	20	／	nm	If= 20 mA
		SYG	／	20	／		
Forward Voltage	Vf	SUR	／	2.0	2.4	V	If= 20 mA
		SYG	／	2.0	2.4		
Reverse Current	Ir		／	／	10	μA	Vr= 5 V

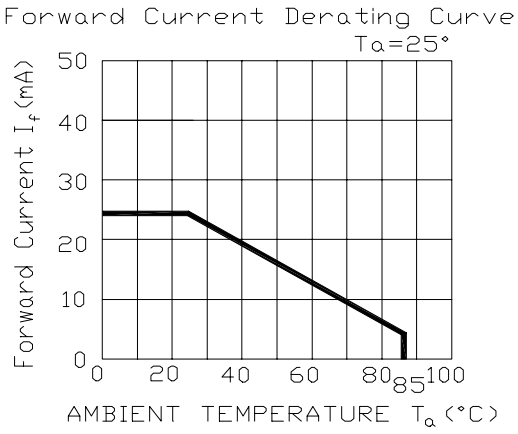
■ Typical Electro-Optical Characteristic Curves

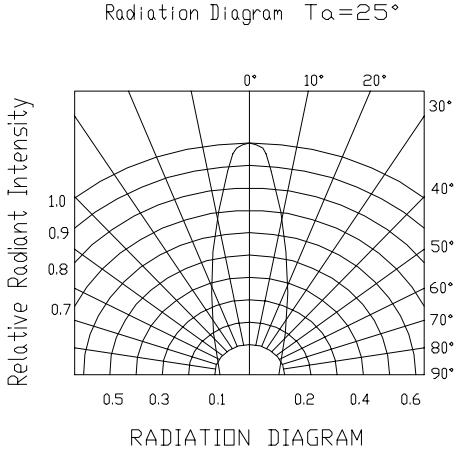






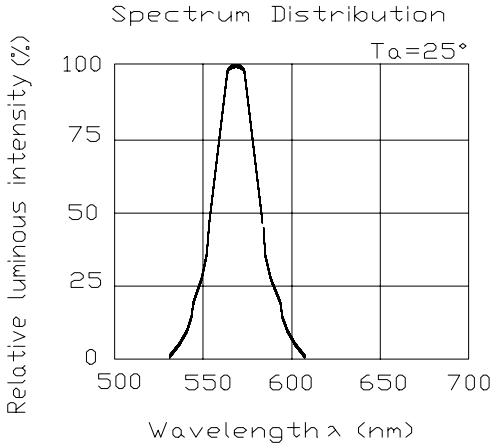


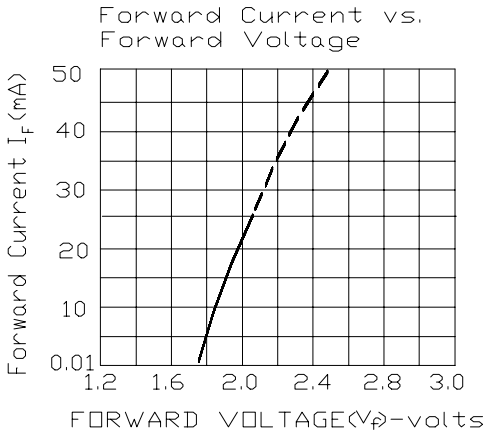


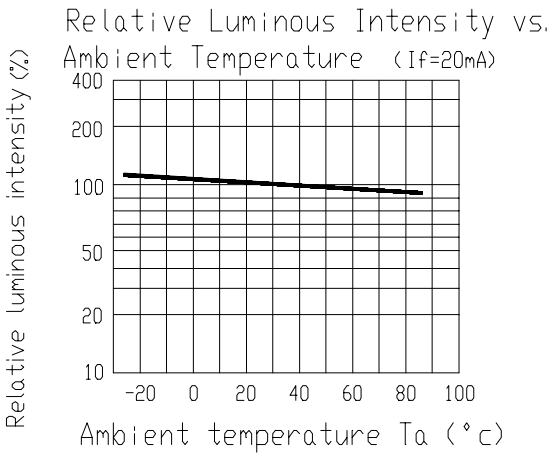


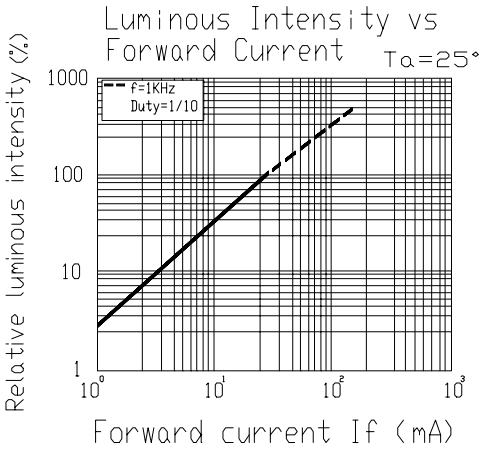
■ Typical Electro-Optical Characteristic Curves

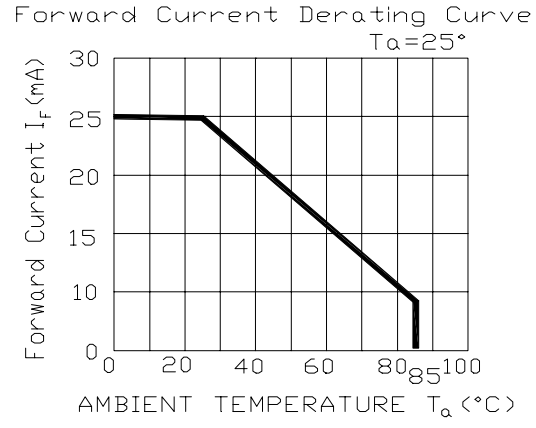
SYG

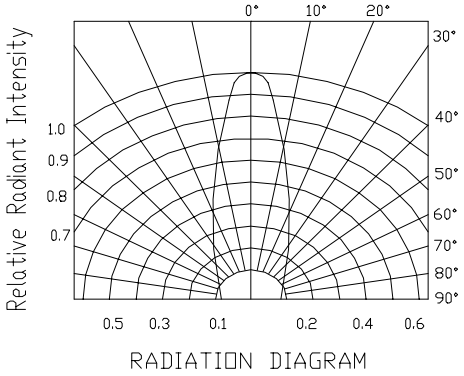












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■ Reliability test item and condition

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 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min ∫ 10 sec L : -10℃ 5min	50 CYCLE	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	If = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 PCS	0/1