



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDLE-051-030 REV.: 2

2.0*5.0mm Multi-Color Rectangle Type LED Lamps

PART NO. : 519EGW

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 consuming

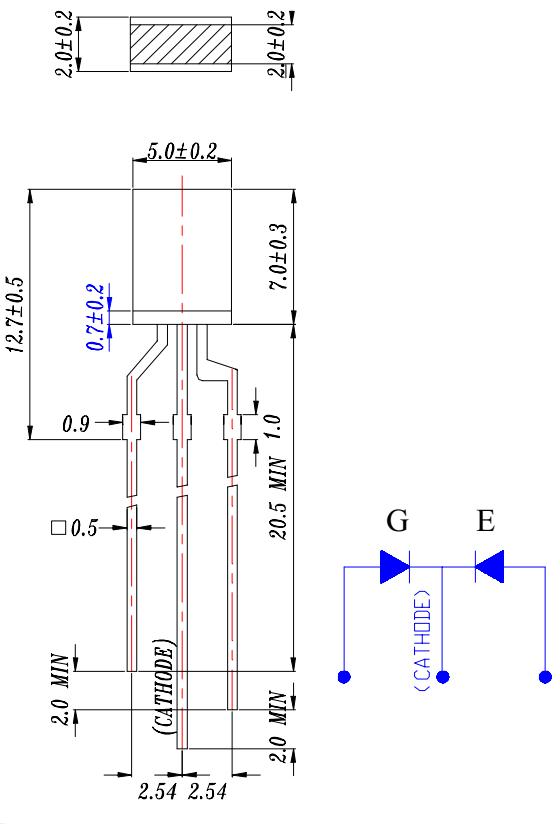
■ Descriptions :

- The 519 LED lamp contain two integral chips and are available as both bicolor and bipolar types.
- The Orange and Green light is emitted by diodes of GaAsP/GaP and GaP respectively.
- Type of bipolar lamps are both White Diffused and Color Diffused while the bicolor are White Diffused.

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Package Dimensions:



■ 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	
519EGW	GaAsP/GaP	Orange	White Diffused
	GaP	Green	

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<http://www.everlight.com>



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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating		Unit
Forward Current	IF	E	30	mA
		G	30	
Operating Temperature	Topr	-40 to +85		°C
Storage Temperature	Tstg	-40 to +100		°C
Soldering Temperature	Tsol	260 ± 5		°C
Power Dissipation	Pd	E	100	mW
		G	100	
Peak Forward Current (Duty 1/10 @ 1KHz)	IF(Peak)	E	160	mA
		G	160	
Reverse Voltage	VR	5		V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	E	0.20	0.40	/	mcd
		G	0.30	0.80	/	
Viewing Angle	2θ 1/2	/	125	/	deg	IF= 20 mA
Peak Wavelength	λ p	E	/	635	/	nm
		G	/	565	/	
Dominant Wavelength	λ d	E	/	625	/	nm
		G	/	570	/	
Spectrum Radiation Bandwidth	△ λ	E	/	45	/	nm
		G	/	30	/	
Forward Voltage	VF	E	1.7	2.0	2.4	V
		G	1.7	2.1	2.4	
Reverse Current	IR	/	/	10	μA	VR= 5 V



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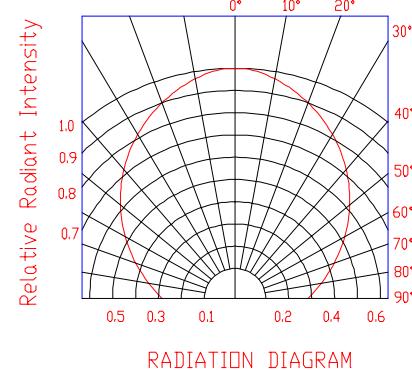
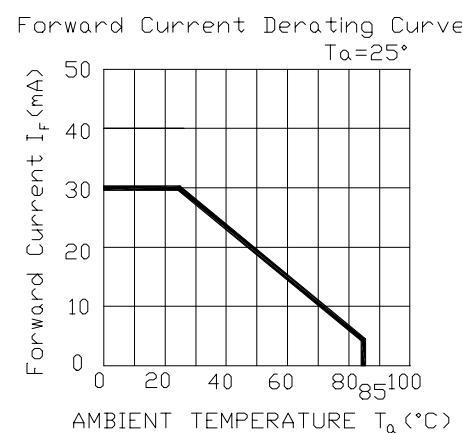
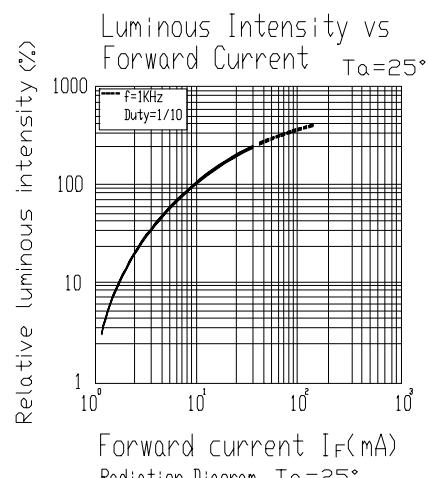
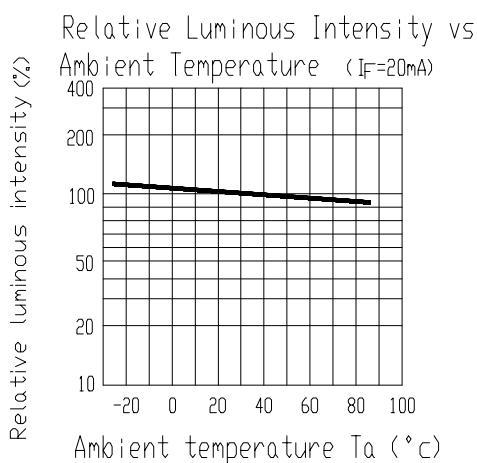
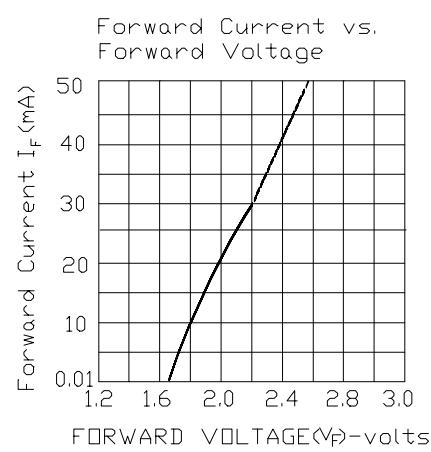
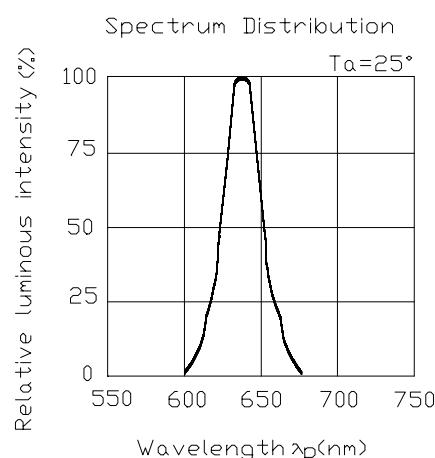
PART NO. : 519EGW

ECN :

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■ Typical Electro-Optical Characteristic Curves:

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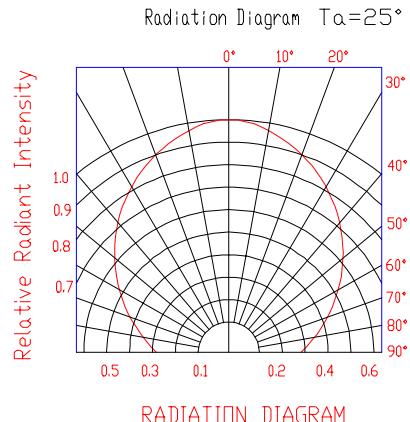
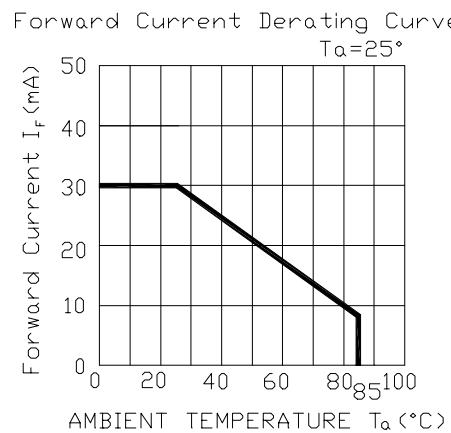
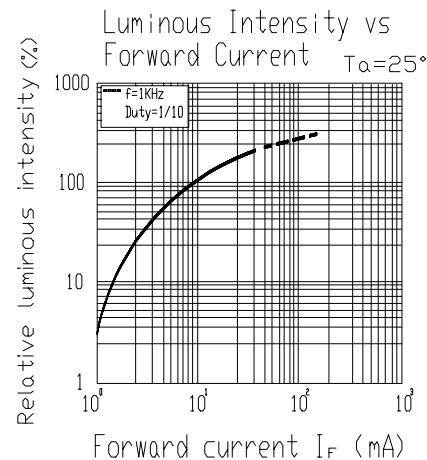
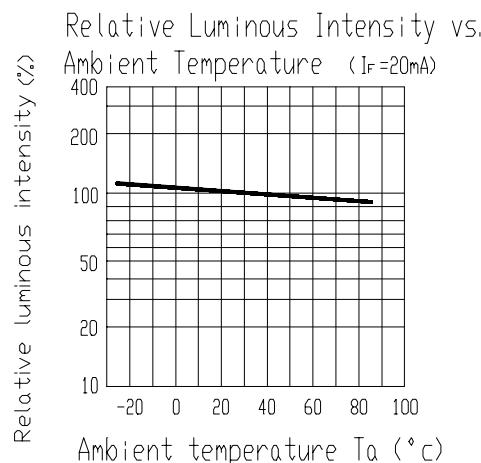
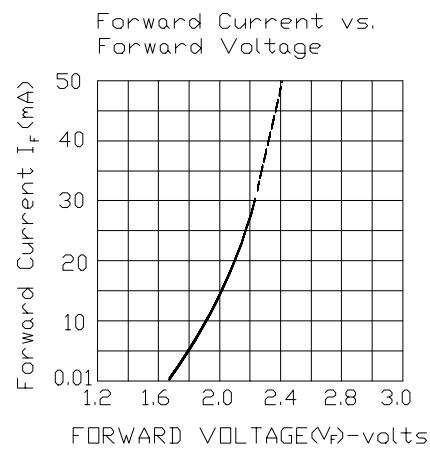
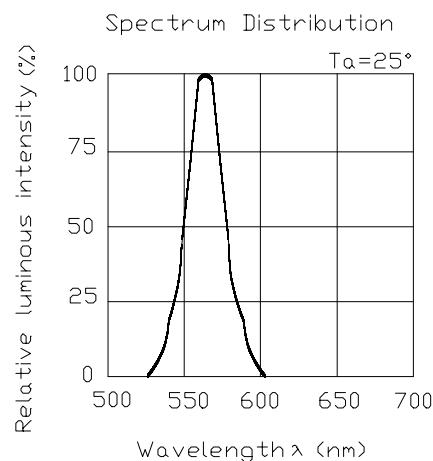


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■ Reliability test items and conditions:

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