



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-031-009 REV: 2.0

### 4.7mm Round Type LED Lamps

MODEL NO : 313GD ECN : \_\_\_\_\_ Page: 1/4

#### ■ Features :

- Choice of various viewing angles
- Available on table and reel
- Reliable and robust

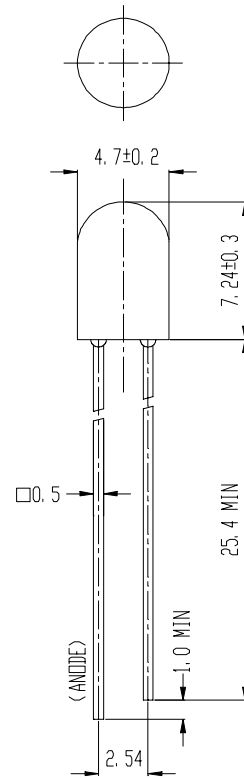
#### ■ Description :

- The series is specially designed for applications requiring higher brightness than that achievable with standard lamp.
- The LED lamp are available with different colors, light intensities, epoxy colors, etc.

#### ■ Applications :

- TV set
- Monitor
- Telephone
- Computer

#### ■ Package Dimension:



#### ■ NOTES :

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

PART NO	CHIP		Lens Color
	Material	Emitted Color	
313GD	GaP	Green	Green Diffused

DESIGNER	CHECKER	APPROVER

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Tucheng,Taipei 236,Taiwan,R.O.C.

TEL : 886-2-2267-2000,2266-9936(22 Lines)

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**Absolute Maximum Ratings at Ta = 25°C**

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

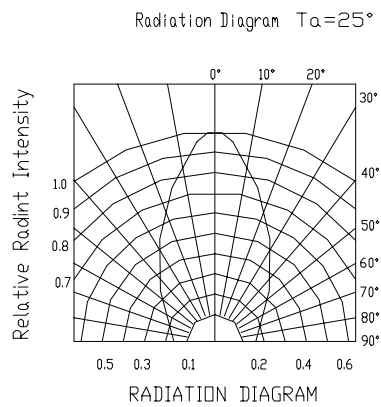
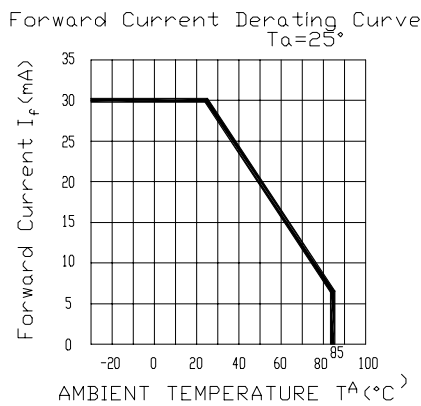
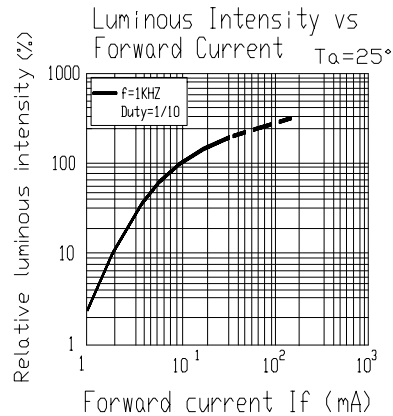
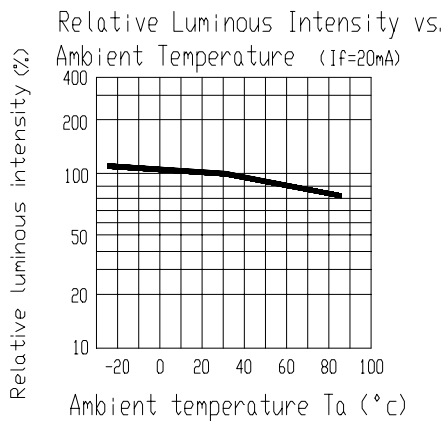
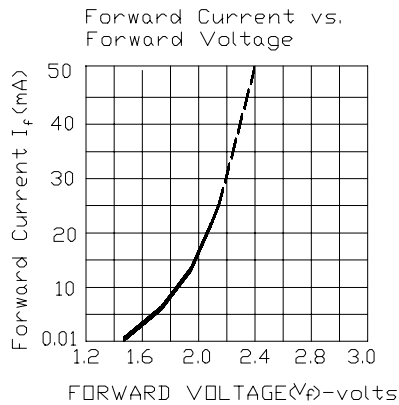
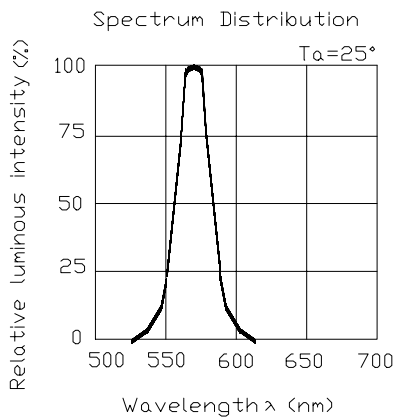
**Electronic Optical Characteristics :**

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous intensity	Iv	2.50	5.00	/	mcd	If= 10 mA
Viewing Angle	2θ 1/2	/	60	/	deg	If= 20 mA
Peak Wavelength	λ p	/	565	/	nm	If= 20 mA
Dominant Wavelength	λ d	/	570	/	nm	If= 20 mA
Spectrum Radiation Bandwidth	Δ λ	/	30	/	nm	If= 20 mA
Forward Voltage	Vf	1.70	2.10	2.40	V	If= 20 mA
Reverse Current	Ir	/	/	10	μ A	Vr= 5 V



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■ Typical Electro-Optical Characteristic Curves





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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°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	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