



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-048-035 REV: 1.1

3.0mm Very Wide Angle Type LED Lamps

PART NO. : 484PGD ECN : \_\_\_\_\_ Page: 1/4

## ■ Features :

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

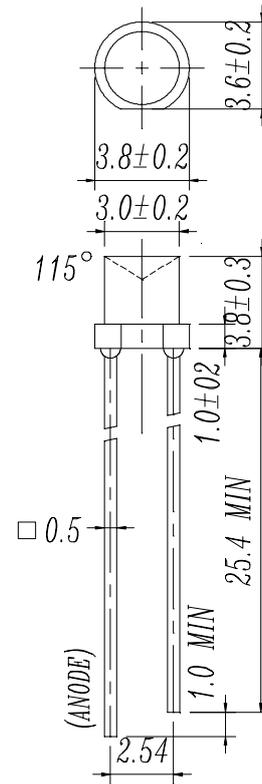
## ■ Descriptions:

- The series is specially designed for applications requiring higher brightness.
- The LED lamps are available with different colors, intensities, epoxy colors, etc.

## ■ 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  $\pm 0.25\text{mm}$

PART NO	Chip		Lens Color
	Material	Emitted Color	
484PGD	GaP	Green	Green Diffused

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## ■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	I <sub>F</sub>	30	mA
Operating Temperature	T <sub>opr</sub>	-40 to +85	°C
Storage Temperature	T <sub>stg</sub>	-40 to +100	°C
Soldering Temperature	T <sub>sol</sub>	260 ± 5	°C
Power Dissipation	P <sub>d</sub>	100	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	I <sub>F(Peak)</sub>	160	mA
Reverse Voltage	V <sub>R</sub>	5	V

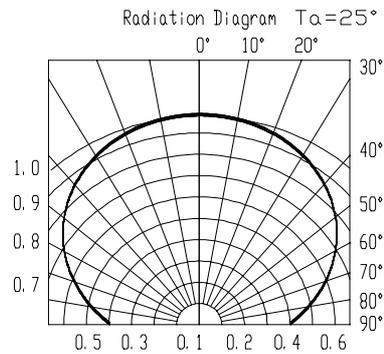
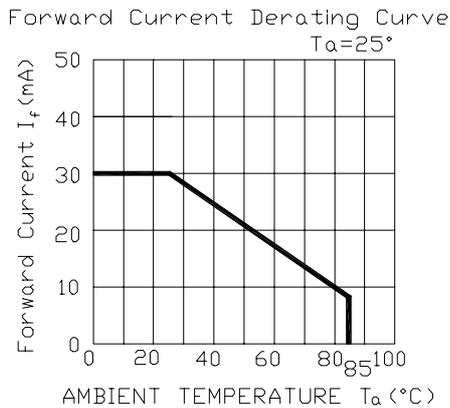
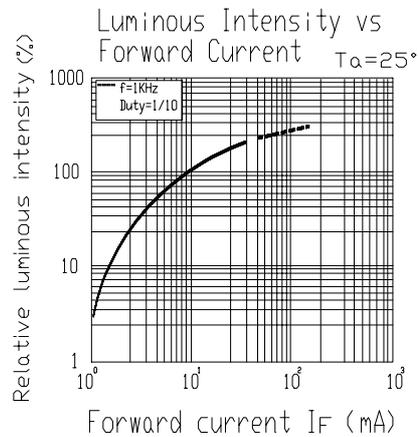
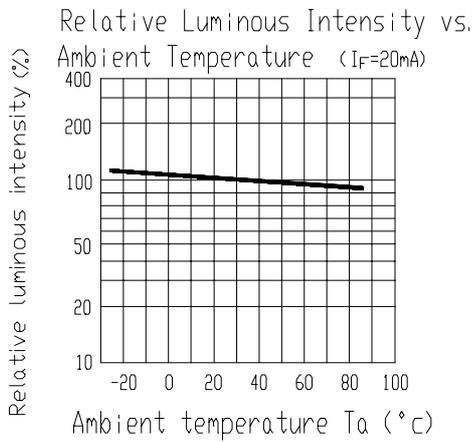
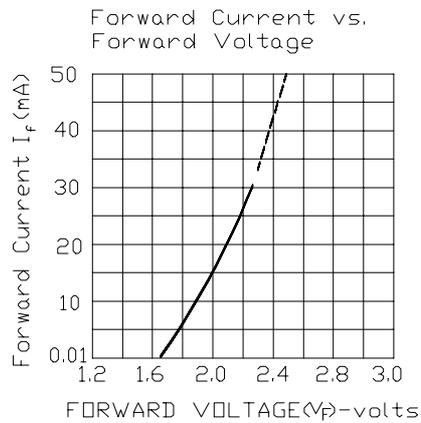
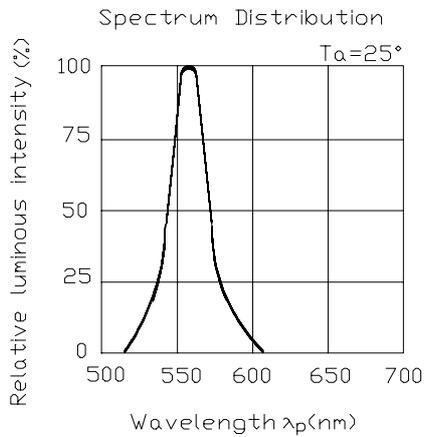
## ■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I <sub>v</sub>	0.40	0.6	/	mcd	I <sub>F</sub> = 10 mA
Viewing Angle	2θ 1/2	/	160	/	deg	I <sub>F</sub> = 20 mA
Peak Wavelength	λ <sub>p</sub>	/	555	/	nm	I <sub>F</sub> = 20 mA
Dominant Wavelength	λ <sub>d</sub>	/	560	/	nm	I <sub>F</sub> = 20 mA
Spectrum Radiation Bandwidth	Δλ	/	30	/	nm	I <sub>F</sub> = 20 mA
Forward Voltage	V <sub>F</sub>	1.7	2.1	2.4	V	I <sub>F</sub> = 20 mA
Reverse Current	I <sub>R</sub>	/	/	10	μA	V <sub>R</sub> = 5 V



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■ Typical Electro-Optical Characteristic Curves





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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	TEMP : 25°C IF=20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1