EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-048-037 REV: 1.1

3.0mm Very Wide Angle Type LED Lamps

MODEL NO : 484ET ECN : Page: 1/4

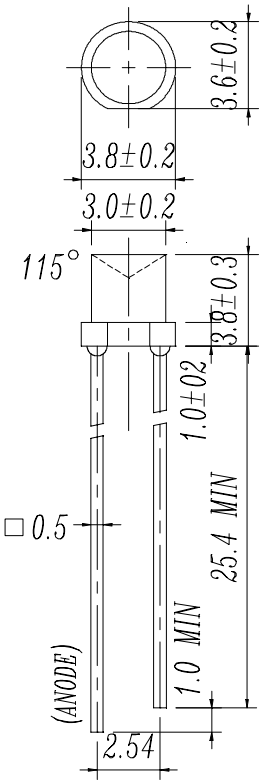
■ Features :

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

■ Description :

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

■ 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	
484ET	GaAsP/GaP	Orange	Orange Trans

DESIGNER	CHECKER	APPROVER

Office : NO 25,Lane 76,Chung Yang Rd,Sec.3
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℃

Parameter	Symbol	Rating	Unit
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
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	1.60	3.20	／	mcd	If= 10 mA
Viewing Angle	2θ 1/2	／	180	／	deg	If= 20 mA
Peak Wavelength	λ p	／	635	／	nm	If= 20 mA
Dominant Wavelength	λ d	／	625	／	nm	If= 20 mA
Spectrum Rediation Bandwidth	△λ	／	45	／	nm	If= 20 mA
Forward Voltage	Vf	1.70	2.00	2.60	V	If= 20 mA
Reverse Current	Ir	／	／	10	μA	Vr= 5 V

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■ Typical Electro-Optical Characteristic Curves

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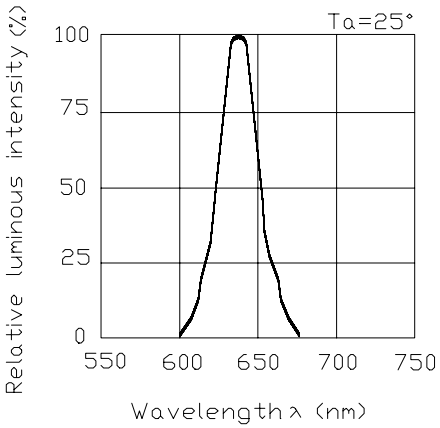
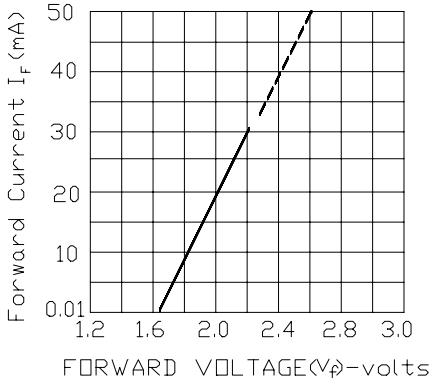
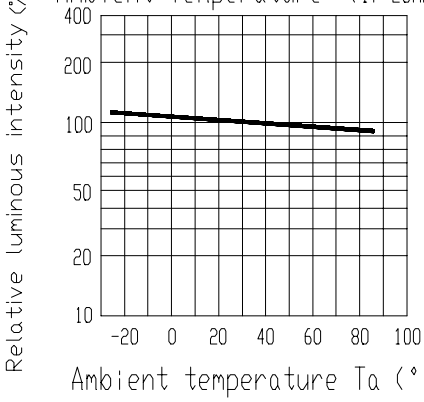
Spectrum Distribution



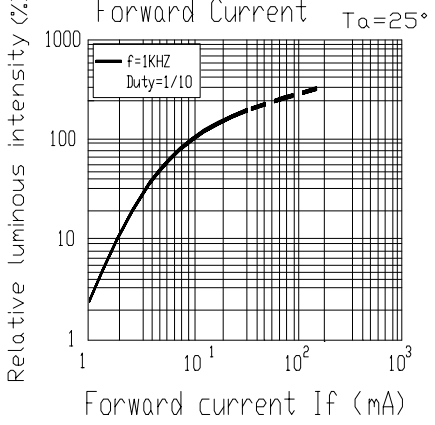
Forward Current vs. Forward Voltage



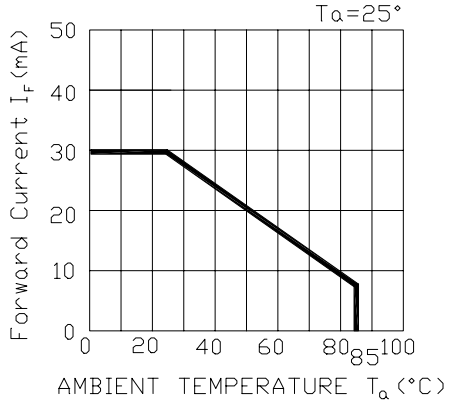
Relative Luminous Intensity vs. Ambient Temperature (If=20mA)

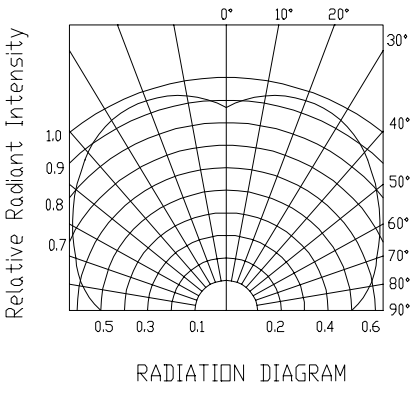


Luminous Intensity vs Forward Current Ta=25°



Forward Current Derating Curve Ta=25°





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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