

Device Number: DLE-049-030 REV: 1.0

3.0mm Very Wide Angle Type LED Lamps

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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: 3.4±0.2 3.0±0.2 3.4±0.2 3.0±0.2 3.5±0.8 2.5±0.8 2.5±0.8 2.5±0.8 3.4±0.2 3.4

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	
494ID	GaAsP/GaP	Hi-Eff Red	Red Diffuseds

B89061500,8906100

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http://www.everlight.com



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Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Forward Current	IF	30	mA
Operating Temperature	Topr	-40 to +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}\mathbb{C}$
Soldering Temperature	Tsol	260 ± 5	$^{\circ}\mathbb{C}$
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.	Тур.	Max.	Unit	Condition
Luminous Intensity	Iv	4.0	6.3	/	mcd	IF= 10 mA
Viewing Angle	2 \theta 1/2	/	100	/	deg	IF= 20 mA
Peak Wavelength	λp	/	635	/	nm	IF= 20 mA
Dominant Wavelength	λd	/	625	/	nm	IF= 20 mA
Spectrum Radiation Bandwidth	Δλ	/	45	/	nm	IF= 20 mA
Forward Voltage	VF	1.7	2.0	2.4	V	IF= 20 mA
Reverse Current	Ir	/		10	μΑ	VR= 5 V

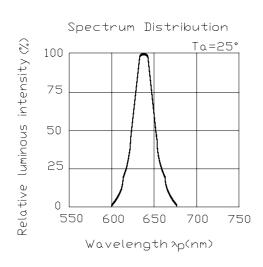


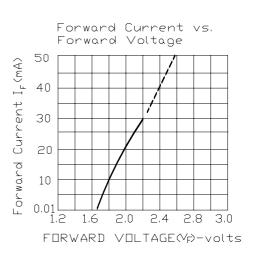
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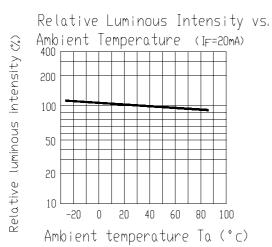
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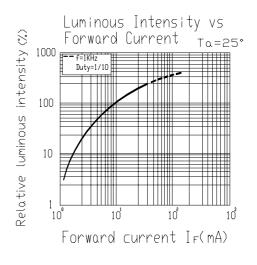
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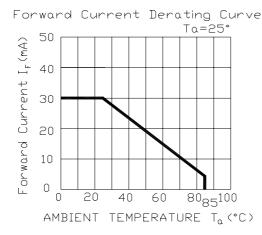
Typical Electro-Optical Characteristic Curves

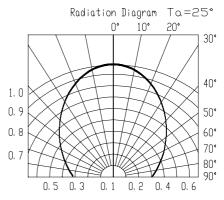














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Reliability test items and conditions

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	$H: +85^{\circ}\mathbb{C}$ 30min $\int 5 \text{ min}$ $L: -55^{\circ}\mathbb{C}$ 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	$H: +100^{\circ}\mathbb{C}$ 5min $\int 10 \sec \mathbb{L}: -10^{\circ}\mathbb{C}$ 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℃	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