



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-822-002

REV: 1.0

3mm Round Small Flange Without stand-off LEDs, T-1

MODEL NO : 8224-10SOT

ECN :

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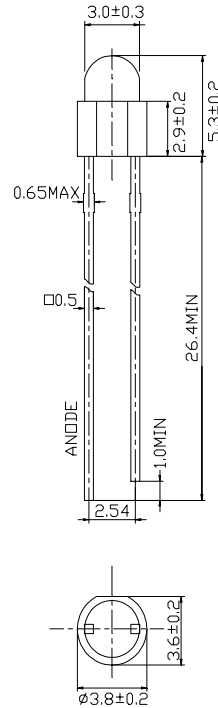
■ Features :

- 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.

■ Package Dimensions:



■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Notes :

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

PART NO	Chip		Lens Color
	Material	Emitted Color	
8224-10SOT	GaAsP/GaP	Sunset Orange	Sunset Orange Trans

A89051069,8905034

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

FAX : 886-2-2267-6244,22676189,22676306

http://www.everlight.com



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Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	If	40	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	110	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	160	mA
Reverse Voltage	Vr	5	V

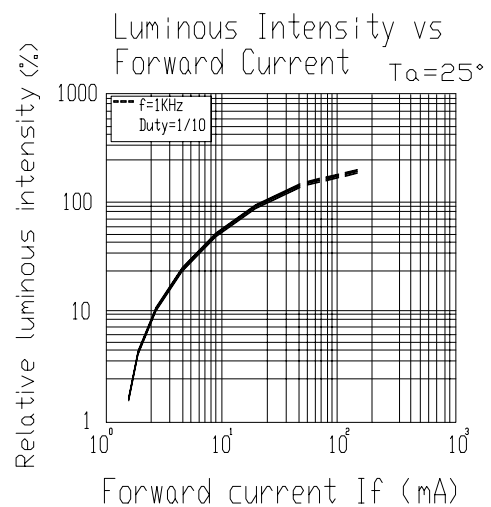
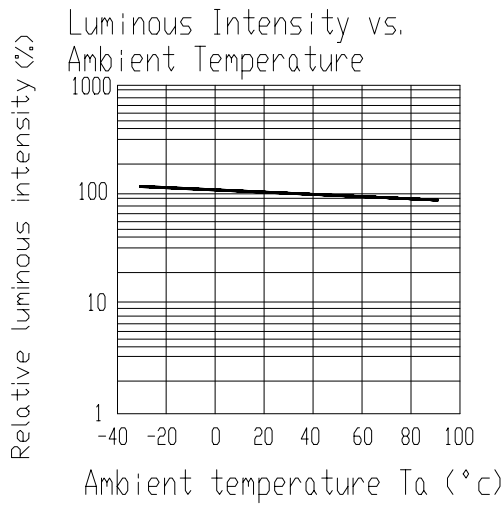
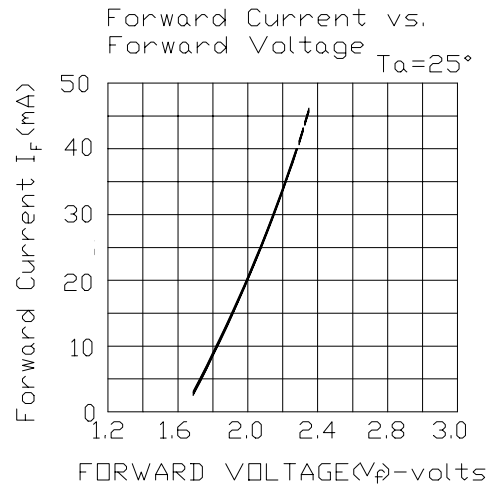
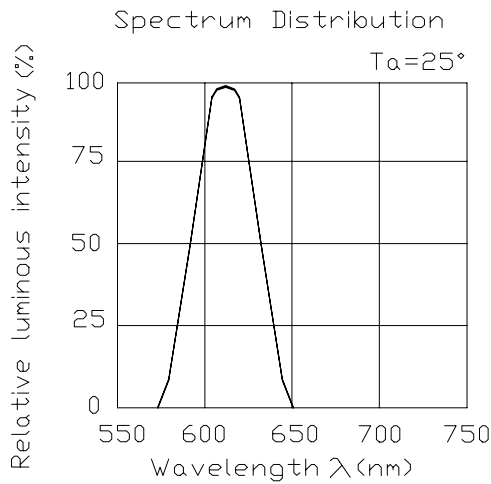
Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	80	100	/	mcd	If= 20 mA
Viewing Angle	2θ 1/2	/	35	/	deg	If= 20 mA
Peak Wavelength	λ p	/	610	/	nm	If= 20 mA
Dominant Wavelength	λ d	/	605	/	nm	If= 20 mA
Spectrum Radiation Bandwidth	Δ λ	/	30	/	nm	If= 20 mA
Forward Voltage	Vf	1.7	2.0	2.4	V	If= 20 mA
Reverse Current	Ir	/	/	10	μ A	Vr= 5 V

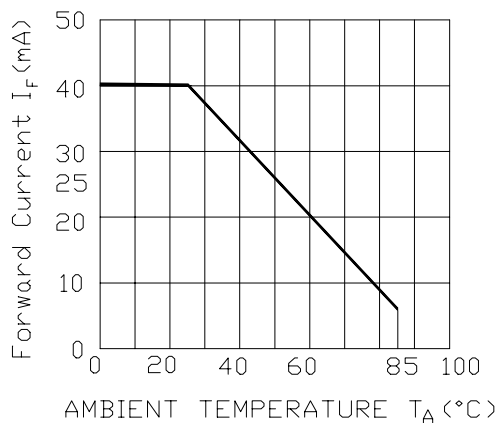


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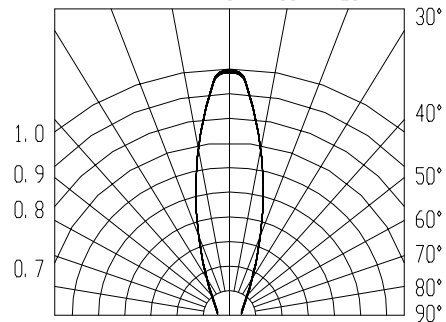
■ Typical Electro-Optical Characteristic Curves



Forward Current Derating Curve



Radiation Diagram T_a=25°





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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 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