

T-1 3/4(5mm) High Intensity LEDs

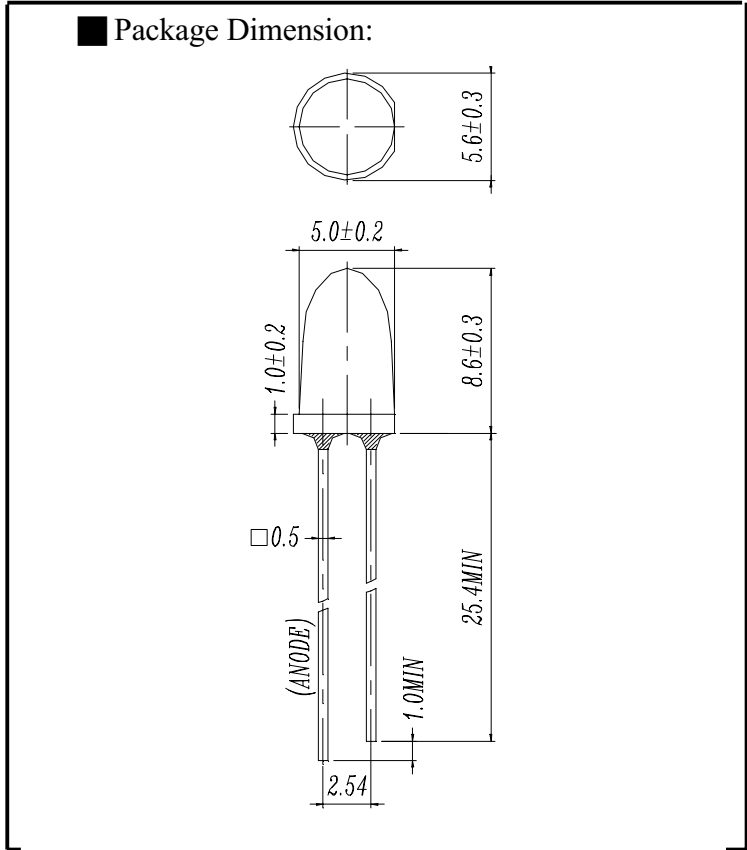
■ Features :

- Popular T-1 3/4 diameter package.
- Choice of various viewing angles.
- Available on tape and reel.
- Reliable and robust.

■ Description :

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

■ Package Dimension:



■ Applications :

- TV Set
- Monitor
- Telephone
- Computer

■ NOTES :

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

PART NO	CHIP		Lens Color
	Material	Emitted Color	
383-2UBGC	InGaN/SiC Substrate	Super Blue Green	Water Clear

DESIGNER	CHECKER	APPROVER

Device Number : DLE-038-122 REV: 1.0

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■ Absolute Maximum Ratings at $T_A = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100	$^\circ\text{C}$
Soldering Temperature	Tsol	260 \pm 5	$^\circ\text{C}$
Power Dissipation	Pd	120	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	100	mA
Reverse voltage	Vr	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous intensity	Iv	1500.0	2500.0	-----	mcd	If=20mA
Viewing Angle	2θ 1/2	----	6	----	deg	If=20mA
Peak Wavelength	λ p	----	502	-----	nm	If=20mA
Dominant Wavelength	λ d	500	505	510	nm	If=20mA
Spectrum Radiation Bandwidth	$\Delta\lambda$	---	30	----	nm	If=20mA
Forward Voltage	Vf	----	3.5	4.0	V	If=20mA
Reverse Current	Ir	----	----	10	μA	Vr=5V

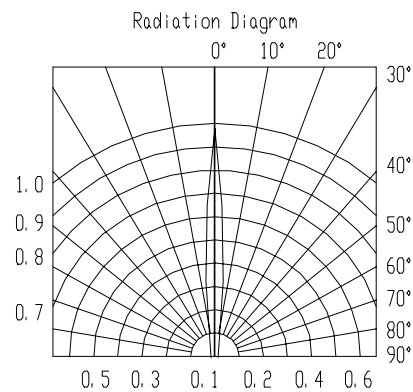
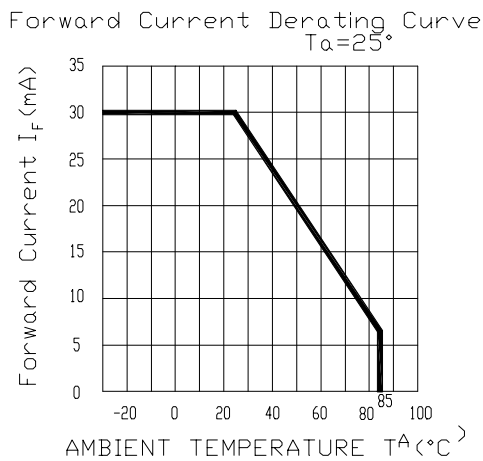
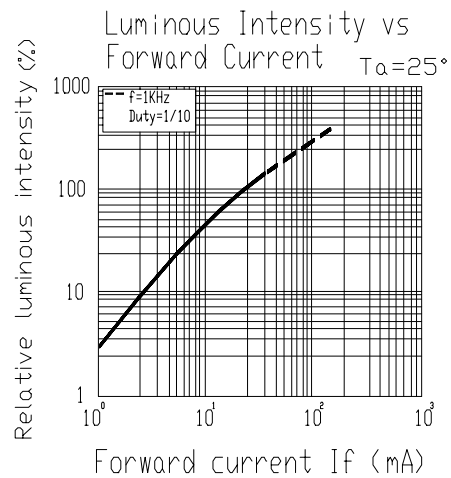
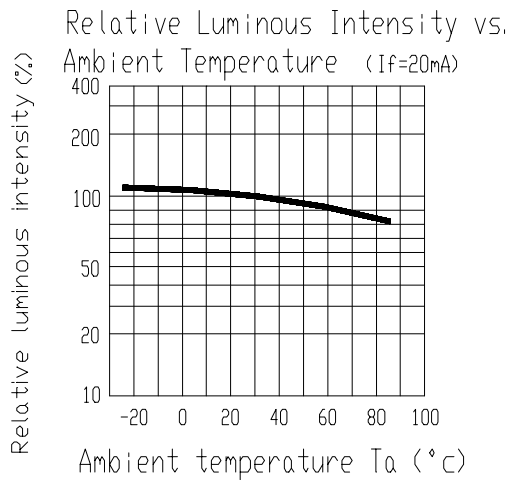
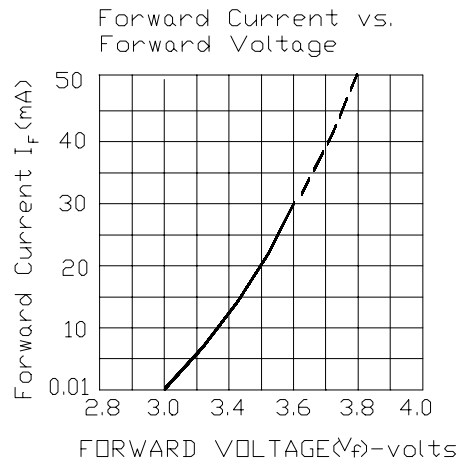
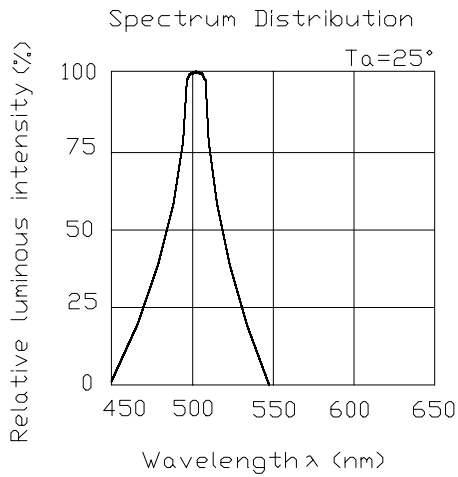
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■ Typical Electro-Optical Characteristic Curves



Device Number : DLE-038-122REV: 1.0

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■ Reliability test items and conditions

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Soldering Heat	TEMP : 260°C ± 5 °C	10±1 SEC	76 Pcs	0/1
2	Solderability	TEMP : 230°C ± 5 °C	5±1 SEC	76 Pcs	0/1
3	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 Pcs	0/1
4	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 Pcs	0/1
5	High Temperature Storage	TEMP : 100°C	1000 HRS	76 Pcs	0/1
6	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 Pcs	0/1
7	DC Operating Life	If = 20 mA	1000 HRS	76 Pcs	0/1
8	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 Pcs	0/1