



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-010-009

REV: 1.1

## 2.0mm Tower Type LED Lamps

MODEL NO : 103YD

ECN : \_\_\_\_\_

Page: 1/4

### ■ Features :

- Low power consumption.
- Suitable for pulse operation.
- Most suitable for audio panel indicator
- Fits 2mm hole in panels up 4.5mm (0.177inch)thick.

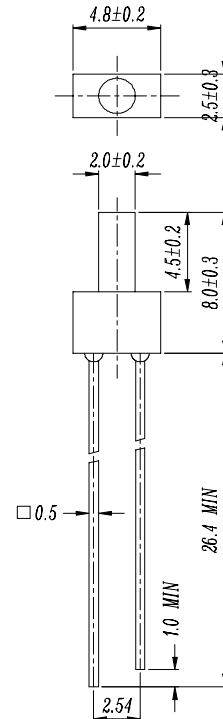
### ■ Description :

- The shape of this series is round.
- General application is for indication, illumination,etc.
- The Led lamp is available with different colors, light intensities,epoxy colors,etc.

### ■ Applications :

- Audio Equipment
- Monitor
- Car meter
- Computer

### ■ Package Dimension:



### ■ NOTES :

- 1.All dimensions are millimeters, tolerance is 0.25 mm except be specified.
- 2.An epoxy meniscus may extend about is 1.5mm(0.059") down the lead.

PART NO	CHIP		Lens Color
	Material	Emitted Color	
103YD	GaAsP/GaP	Yellow	Yellow Diffused

DESIGNER	CHECKER	APPROVER

Office : 7C Building, Lian Hua Port Industrial District, Lian Hua Shan Bonded Processing Zone Pan Yu, Guang Zhou, China  
 TEL : (020)84860913,84860914  
 FAX : (020)84860600



2.0mm Tower Type LED Lamps

**Absolute Maximum Ratings at TA = 25°C**

Parameter	Symbol	Rating	Unit
Forward Current	If	20	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	85	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	160	mA
Reverse Voltage	Vr	5	V

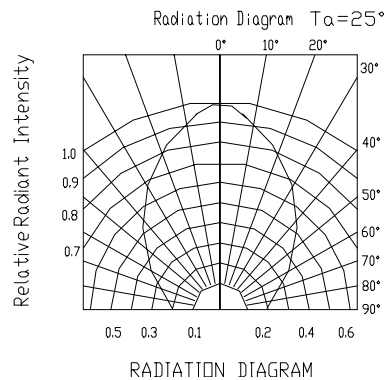
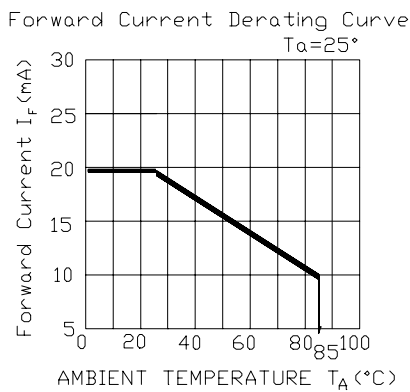
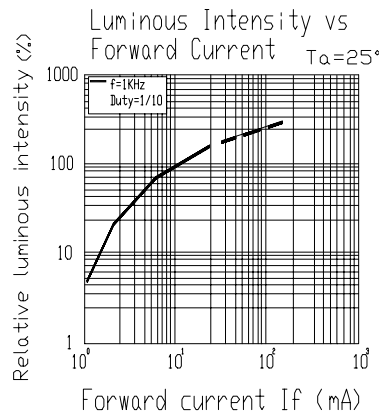
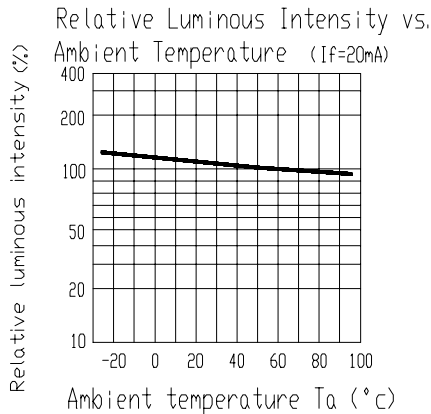
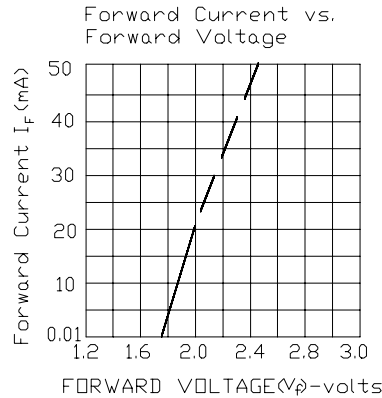
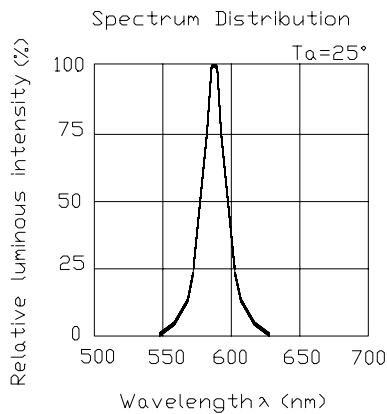
**Electronic Optical Characteristics :**

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous intensity	Iv	1.00	2.50	-----	mcd	If= 10 mA
Viewing Angle	2θ 1/2	----	90	----	deg	If= 20 mA
Peak Wavelength	λ p	----	585	----	nm	If= 20 mA
Dominant Wavelength	λ d	----	590	----	nm	If= 20 mA
Spectrum Radiation Bandwidth	Δ λ	----	35	----	nm	If= 20 mA
Forward Voltage	Vf	1.7	2.0	2.6	V	If= 20 mA
Reverse Current	Ir	----	----	10	u A	Vr =5V



2.0mm Tower Type LED Lamps

■ Typical Electro-Optical Characteristic Curves





# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-010-009 REV: 1.1

2.0mm Tower Type LED Lamps

MODEL NO : 103YD ECN :  Page: 4/4

## ■ Reliability test item and condition

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