



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-033-521 REV: 1.3

T-1 3/4 (5mm) Round Shape LEDs

PART NO. : 333-2UYC/S400 ECN :                      Page: 1/4

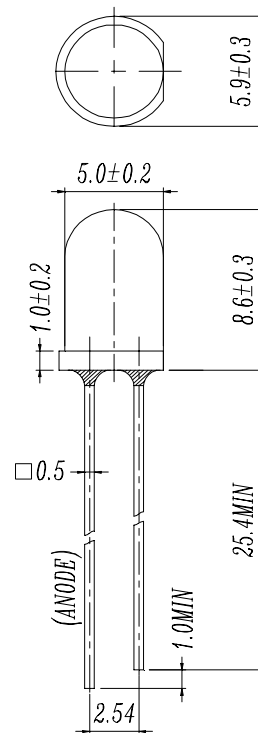
## ■ Features :

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

## ■ Descriptions :

- The series is specially designs for applications require higher brightness
- 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 millimeters.
- 2.An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.

| PART NO       | Chip     |               | Lens Color  |
|---------------|----------|---------------|-------------|
|               | Material | Emitted Color |             |
| 333-2UYC/S400 | AlGaInP  | Super Yellow  | Water Clear |

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>



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-033-521 REV: 1.3

T-1 3/4 (5mm) Round Shape LEDs

PART NO : 333-2UYC/S400 ECN :          Page: 2/4

■ Absolute Maximum Ratings at T<sub>A</sub> = 25°C

| Parameter                                 | Symbol                | Rating      | Unit |
|-------------------------------------------|-----------------------|-------------|------|
| Forward Current                           | I <sub>F</sub>        | 50          | mA   |
| Operating Temperature                     | T <sub>opr</sub>      | -40 to +85  | °C   |
| Storage Temperature                       | T <sub>stg</sub>      | -40 to +100 | °C   |
| Soldering Temperature                     | T <sub>sol</sub>      | 260 ± 5     | °C   |
| Electrostatic Discharge                   | ESD                   | 2000        | V    |
| Power Dissipation                         | P <sub>d</sub>        | 120         | mW   |
| Peak Forward Current(Duty<br>1/10 @ 1KHz) | I <sub>F</sub> (Peak) | 200         | mA   |
| Reverse Voltage                           | V <sub>R</sub>        | 5           | V    |

■ Electronic Optical Characteristics :

| Parameter                       | Symbol         | Min.  | Typ. | Max.  | Unit | Condition            |
|---------------------------------|----------------|-------|------|-------|------|----------------------|
| Luminous Intensity              | I <sub>v</sub> | 1600  | 2500 | ---   | mcd  | I <sub>F</sub> =20mA |
| Viewing Angle                   | 2θ 1/2         | ----  | 10   | ----  | deg  | I <sub>F</sub> =20mA |
| Peak Wavelength                 | λ <sub>p</sub> | ----  | 591  | ----  | nm   | I <sub>F</sub> =20mA |
| Dominant Wavelength             | λ <sub>d</sub> | ----- | 589  | ----  | nm   | I <sub>F</sub> =20mA |
| Spectrum Radiation<br>Bandwidth | △λ             | ----  | 15   | ----- | nm   | I <sub>F</sub> =20mA |
| Forward Voltage                 | V <sub>f</sub> | ----  | 2.0  | 2.4   | V    | I <sub>F</sub> =20mA |
| Reverse Current                 | I <sub>r</sub> | ----  | ---- | 10    | μA   | V <sub>r</sub> =5V   |



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-033-521

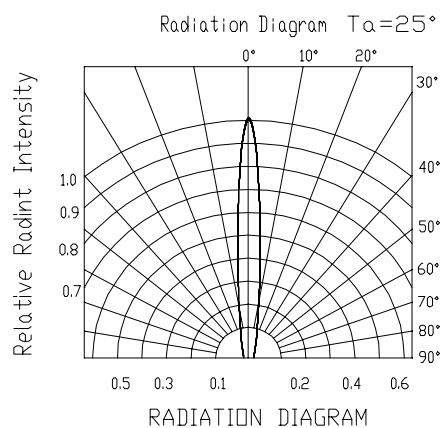
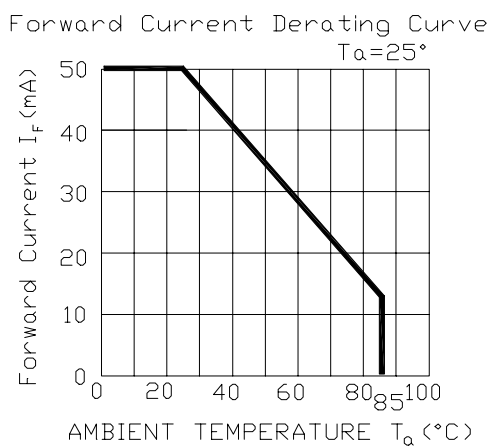
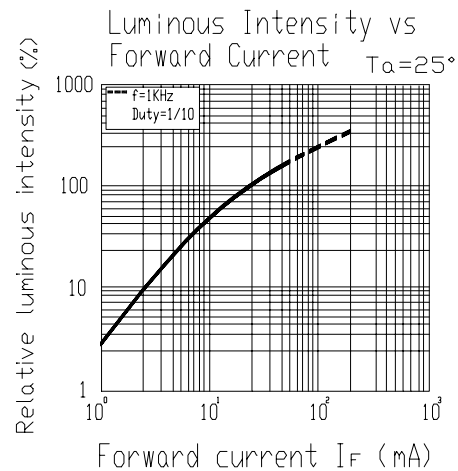
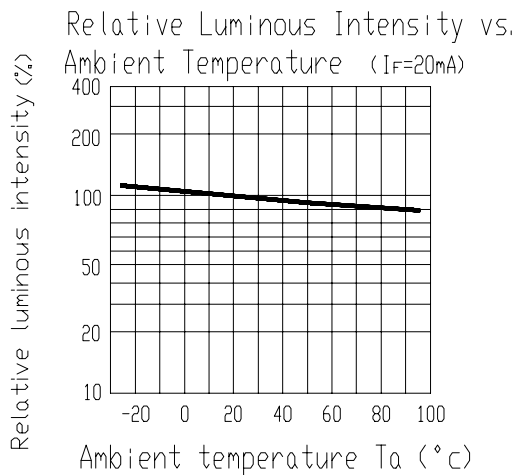
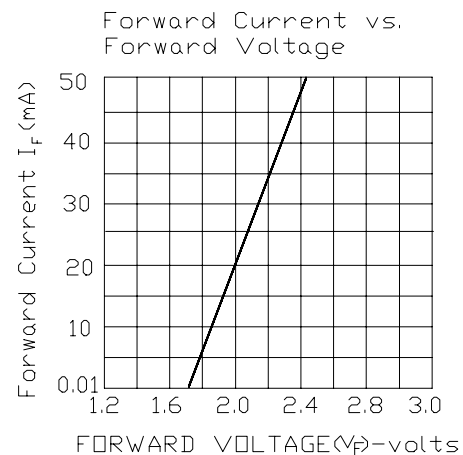
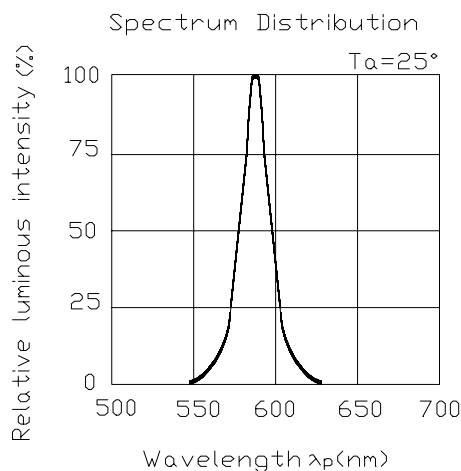
REV: 1.3

T-1 3/4 (5mm) Round Shape LEDs

PART NO : 333-2UYC/S400

ECN :                      Page: 3/4

## ■ Typical Electro-Optical Characteristic Curves





# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-033-521 REV: 1.3

T-1 3/4 (5mm) Round Shape LEDs

PART NO : 333-2UYC/S400 ECN :                      Page: 4/4

## ■ 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<br>└ 5 min<br>L : -55°C 30min | 50 CYCLE         | 76 PCS      | 0/1   |
| 3  | Thermal Shock                    | H : +100°C 5min<br>└ 10 sec<br>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   |