# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-047-029 REV: 1.1

## 5.0mm Very Wide Angle Type LED Lamps

MODEL NO : 473YT ECN : Page: 1/4

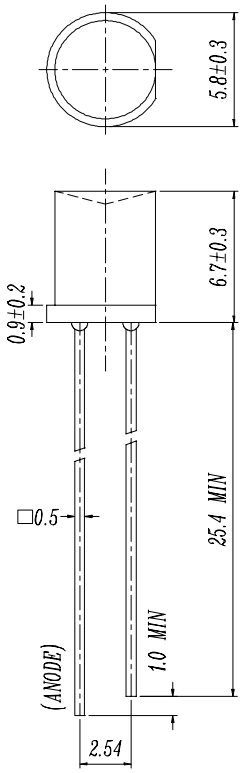
## ■ Features :

- Choice of various viewing angles
- Available on tape and reel
- Reliable and rubust

## ■ Description :

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

## ■ Package Dimension:




## ■ Applications :

- TV set
- Monitor
- Telephone
- Computer

## ■ NOTES :

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

| PART NO | CHIP | | Lens Color |
|---|---|---|---|
| | Material | Emitted Color | |
| 473YT | GaAsP/GaP | Yellow | Yellow Trans |

| DESIGNER | CHECKER | APPROVER |
|---|---|---|
| | | |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## ■ Absolute Maximum Ratings at Ta = 25℃

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Forward Current | If | 20 | mA |
| Operating Temperature | Topr | -40 to +85 | ℃ |
| Storage Temperature | Tstg | -40 to +100 | ℃ |
| Soldering Temperature | Tsol | 260 ± 5 | ℃ |
| 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 | 1.60 | ／ | mcd | If= 10 mA |
| Viewing Angle | 2θ 1/2 | ／ | 150 | ／ | deg | If= 20 mA |
| Peak Wavelength | λ p | ／ | 585 | ／ | nm | If= 20 mA |
| Dominant Wavelength | λ d | ／ | 590 | ／ | nm | If= 20 mA |
| Spectrum Rediation Bandwidth | △λ | ／ | 35 | ／ | nm | If= 20 mA |
| Forward Voltage | Vf | 1.70 | 2.00 | 2.60 | V | If= 20 mA |
| Reverse Current | Ir | ／ | ／ | 10 | μA | Vr= 5 V |

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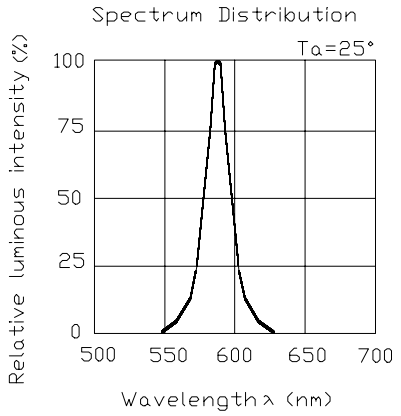
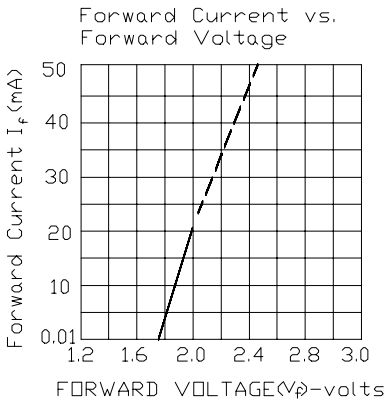
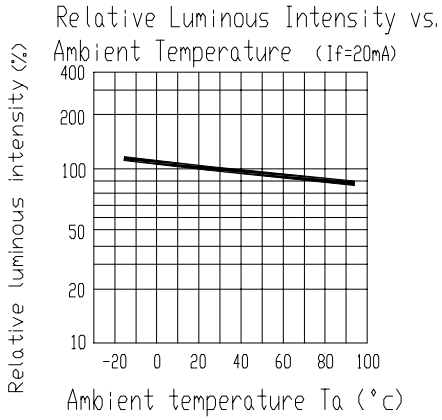
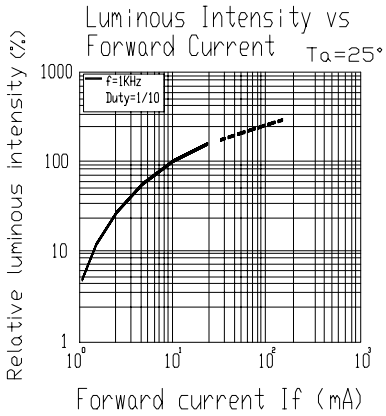
MODEL NO : 473YT ECN : Page: 3/4

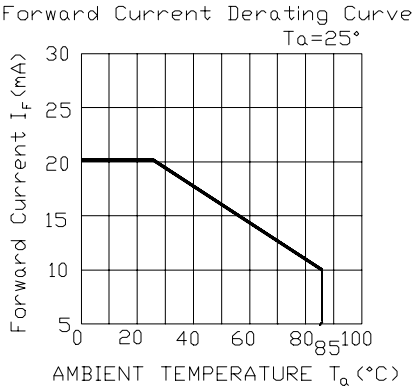
## ■ Typical Electro-Optical Characteristic Curves

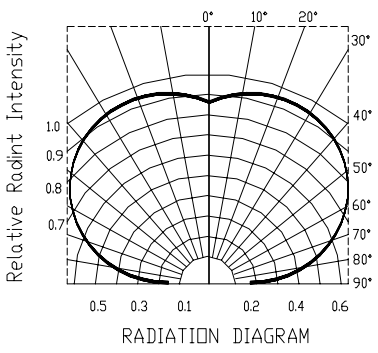


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## ■ Reliability test item and condition

| No | Item | Test Conditions | Test Hours/Cycle | Sample Size | Ac/Re |
|---|---|---|---|---|---|
| 1 | Solder Heat | TEMP : 260℃ ± 5 ℃ | 5 SEC | 76 PCS | 0/1 |
| 2 | Temperature Cycle | H : +85℃ 30min<br>∫ 5 min<br>L : -55℃ 30min | 50 CYCLE | 76 PCS | 0/1 |
| 3 | Thermal Shock | H : +100℃ 5min<br>∫ 10 sec<br>L : -10℃ 5min | 50 CYCLE | 76 PCS | 0/1 |
| 4 | High Temperature Storage | TEMP : 100℃ | 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℃/85% RH | 1000 HRS | 76 PCS | 0/1 |