



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-031-090 REV: 1.0

T-1 3/4 (4.7mm) Round Shape LED Lamps

MODEL NO : 313-2SURC/S530-A6 ECN : _____ Page: 1/4

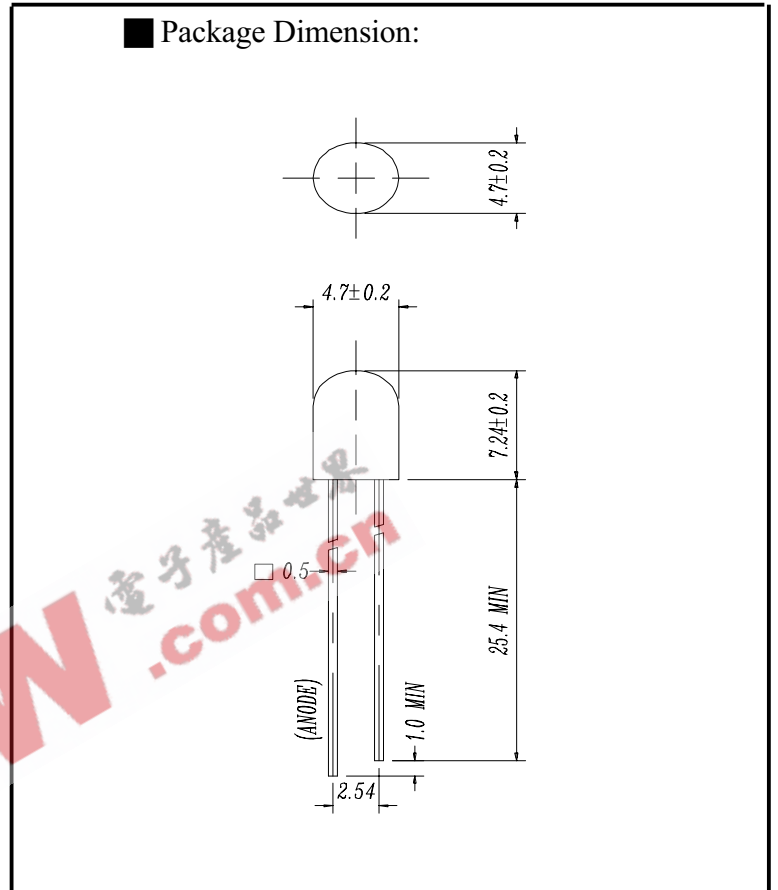
Features :

- 4.7mm round without flange.
- Available on tape and reel.
- Reliable and rugged.
- Improved brightness.
- Narrow viewing angle.

Description :

- ϕ 4.7mm T-1(3/4)all resin mold.
- General application is for indication,illumination,etc.
- The LED lamp is available with different colors,light 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 | |
| 313-2SURC/S530-A6 | AlGaInP | Hyper Red | Water Clear |

| DESIGNER | CHECKER | APPROVER |
|----------|---------|----------|
| | | |

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■ Absolute Maximum Ratings at T_A = 25°C

| Parameter | Symbol | Rating | Unit |
|--|----------------------|-------------|------|
| Forward Current | I _f | 25 | mA |
| Operating Temperature | T _{opr} | -40 to +85 | °C |
| Storage Temperature | T _{stg} | -40 to +100 | °C |
| Soldering Temperature | T _{sol} | 260 ± 5 | °C |
| Power Dissipation | P _d | 60 | mW |
| Peak Forward Current(Duty 1/10 @ 1KHZ) | I _{f(peak)} | 160 | mA |
| Reverse Voltage | V _r | 5 | V |

■ Electronic Optical Characteristics :

| Parameter | Symbol | MIN. | TYP. | MAX. | Unit | Condition |
|------------------------------|----------------|--------------|--------------|------|------|---|
| Luminous intensity | I _v | ----- 770 | 78.6 1310 | ---- | mcd | I _f =2mA I _f =20mA |
| Viewing Angle | 2 θ 1/2 | ---- | 20 | ---- | deg | I _f =20mA |
| Peak Wavelength | λ _p | ---- | 632 | ---- | nm | I _f =20mA |
| Dominant Wavelength | λ _d | ---- | 624 | ---- | nm | I _f =20mA |
| Spectrum Radiation Bandwidth | △λ | ---- | 20 | ---- | nm | I _f =20mA |
| Forward Voltage | V _f | ----- | 2.0 | 2.4 | V | I _f =20mA |
| Reverse Current | I _r | ---- | ---- | 10 | μA | V _r =5V |

ESD:2000V

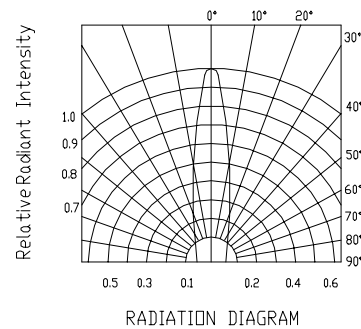
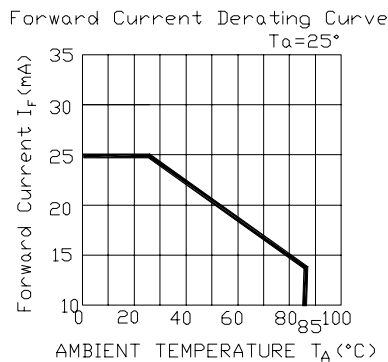
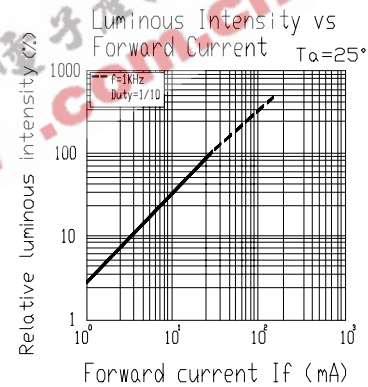
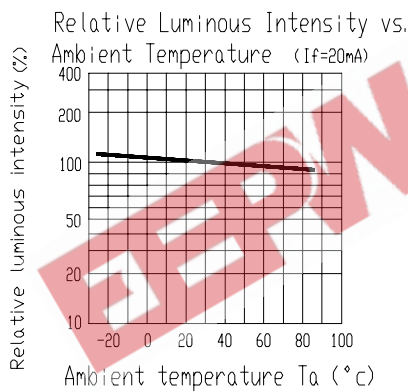
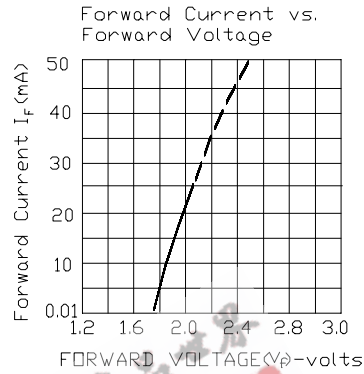
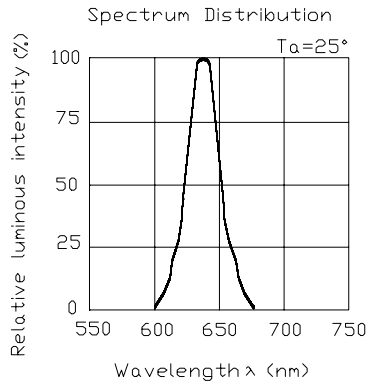


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■ Typical Electro-Optical Characteristic Curves





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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 |