



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-125-036 REV: 1.1

3mm Round Small Flange Without stand-off LEDs, T-1

PART NO. : 1254UBC ECN : _____ Page: 1/4

■ Features :

- High luminous power.
- Can be driven at low current.
- 2.54mm lead spacing.
- Available on tape and reel.

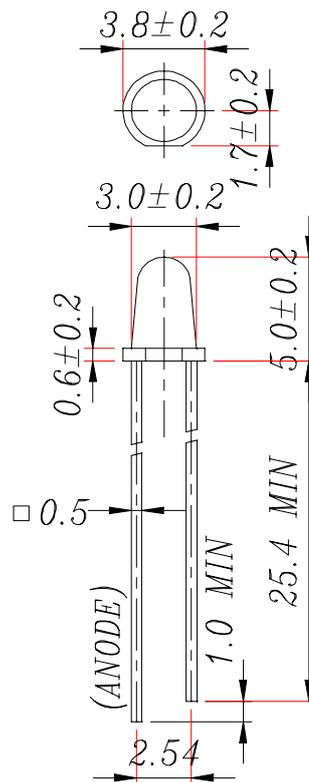
■ Descriptions :

- The series is specially designed for applications requiring higher brightness
- The LED lamps are available with different colors, intensities, epoxy colors, etc.

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Package Dimensions:



■ Notes :

- 1.All dimensions are in millimeters.
- 2.An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3.Tolerances unless dimension ± 0.25 mm.

| PART NO. | Chip | | Lens Color |
|----------|----------|---------------|-------------|
| | Material | Emitted Color | |
| 1254UBC | GaN/SiC | Blue | 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>



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■ Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|--|----------------------|-------------|------|
| Forward Current | I _F | 30 | mA |
| Operating Temperature | T _{opr} | -40 to +85 | °C |
| Storage Temperature | T _{stg} | -40 to +100 | °C |
| Soldering Temperature | T _{sol} | 260 ± 5 | °C |
| Electrostatic Discharge | ESD | 1000 | V |
| Power Dissipation | P _d | 140 | mW |
| Peak Forward Current(Duty 1/10 @ 1KHz) | I _{F(Peak)} | 70 | mA |
| Reverse Voltage | V _R | 5 | V |

■ Electronic Optical Characteristics :

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|------------------------------|----------------|------|------|------|------|------------------------|
| Luminous Intensity | I _v | 250 | 400 | / | mcd | I _F = 20 mA |
| Viewing Angle | 2θ 1/2 | / | 40 | / | deg | I _F = 20 mA |
| Peak Wavelength | λ _p | / | 428 | / | nm | I _F = 20 mA |
| Dominant Wavelength | λ _d | / | 466 | / | nm | I _F = 20 mA |
| Spectrum Radiation Bandwidth | Δλ | / | 65 | / | nm | I _F = 20 mA |
| Forward Voltage | V _F | 3.0 | 3.8 | 4.5 | V | I _F = 20 mA |
| Reverse Current | I _R | / | / | 50 | μA | V _R = 5 V |



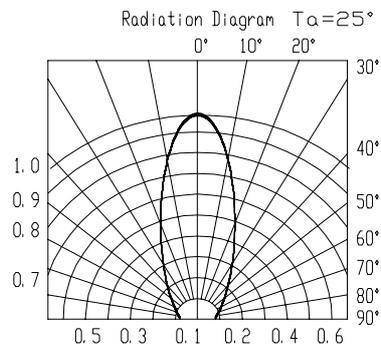
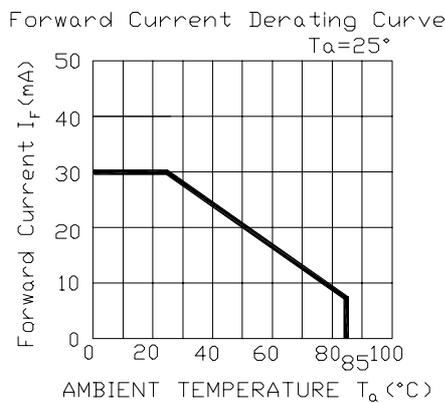
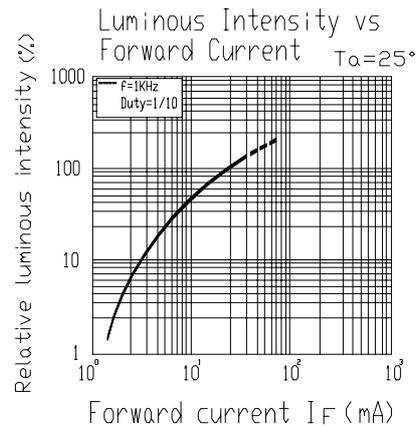
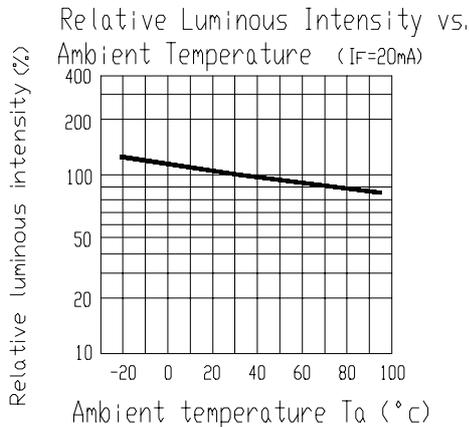
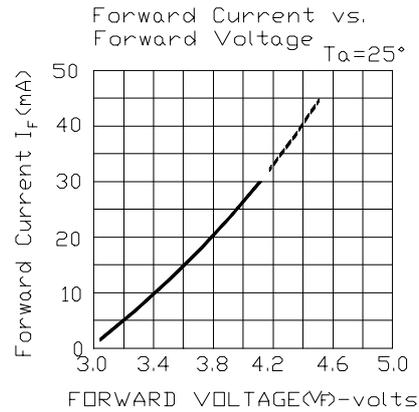
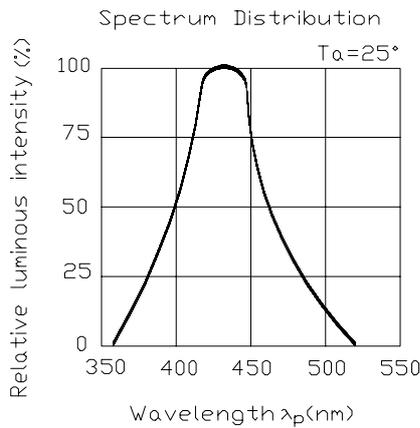
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■ Typical Electro-Optical Characteristic Curves:





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■ Reliability test items and conditions:

| No | Item | Test Conditions | Test Hours/Cycle | Sample Size | Ac/Re |
|----|----------------------------------|---|------------------|-------------|-------|
| 1 | 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 CYCLES | 76 PCS | 0/1 |
| 3 | Thermal Shock | H : +100°C 5min ∫ 10 sec L : -10°C 5min | 50 CYCLES | 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 | TEMP : 25°C IF=20mA | 1000 HRS | 76 PCS | 0/1 |
| 7 | High Temperature / High Humidity | 85°C /85% RH | 1000 HRS | 76 PCS | 0/1 |