



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-138-003 REV: 1.1

5.0mm Round Type LED Lamps

MODEL NO : 1383GD ECN : _____ Page: 1/4

■ Features :

- Choice of various viewing angles
- Available on table and reel
- Reliable and robust

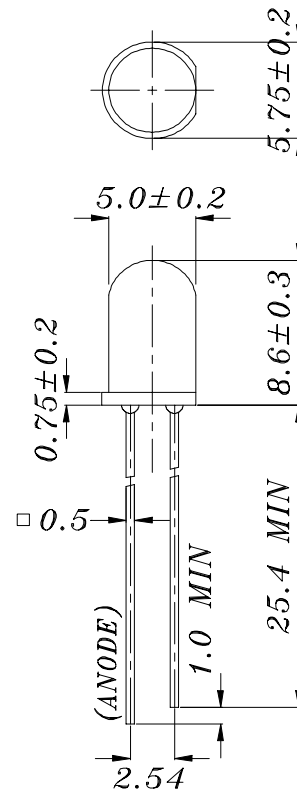
■ Description :

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

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Package Dimension:



■ NOTES :

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

| PART NO | CHIP | | Lens Color |
|---------|----------|---------------|----------------|
| | Material | Emitted Color | |
| 1383GD | GaP | Green | Green Diffused |

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

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Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|--|----------|-------------|------|
| Forward Current | If | 30 | mA |
| Operating Temperature | Topr | -40 to +85 | °C |
| Storage Temperature | Tstg | -40 to +100 | °C |
| Soldering Temperature | Tsol | 260 ± 5 | °C |
| Power Dissipation | Pd | 100 | mW |
| Peak Forward Current(Duty 1/10 @ 1KHZ) | If(Peak) | 160 | mA |
| Reverse Voltage | Vr | 5 | V |

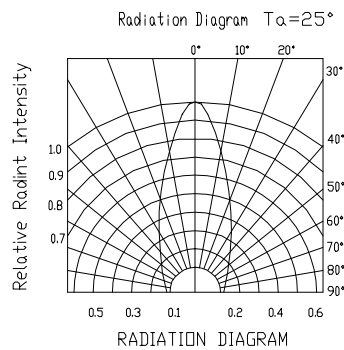
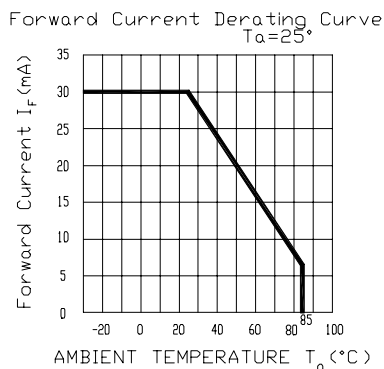
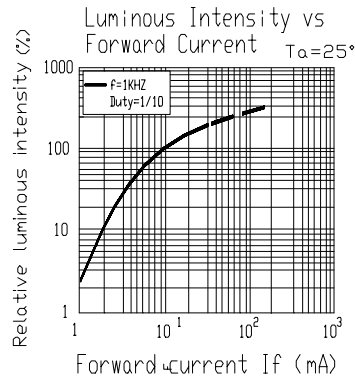
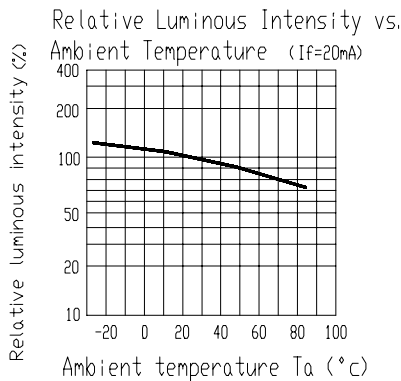
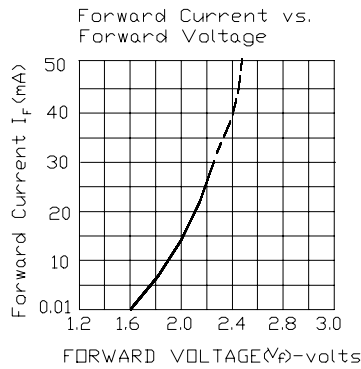
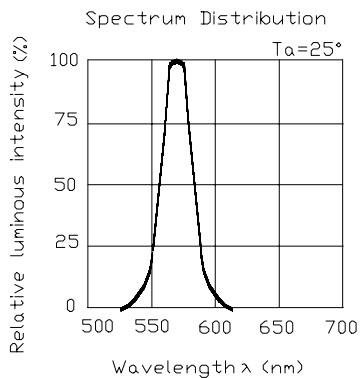
Electronic Optical Characteristics :

| Parameter | Symbol | MIN. | TYP. | MAX. | Unit | Condition |
|------------------------------|--------|------|------|------|------|-----------|
| Luminous intensity | Iv | 25.0 | 40.0 | / | mcd | If= 10 mA |
| Viewing Angle | 2θ 1/2 | / | 40 | / | deg | If= 20 mA |
| Peak Wavelength | λ p | / | 565 | / | nm | If= 20 mA |
| Dominant Wavelength | λ d | / | 570 | / | nm | If= 20 mA |
| Spectrum Radiation Bandwidth | Δ λ | / | 30 | / | nm | If= 20 mA |
| Forward Voltage | Vf | 1.70 | 2.10 | 2.40 | V | If= 20 mA |
| Reverse Current | Ir | / | / | 10 | μ A | Vr= 5 V |



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■ Typical Electro-Optical Characteristic Curves





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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 |