

Device Number: DLE-138-018 REV: 1.2

5.0mm Round Type LED Lamps

PART NO.: 1383GD/T2 ECN: Page: 1/4

Features:

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

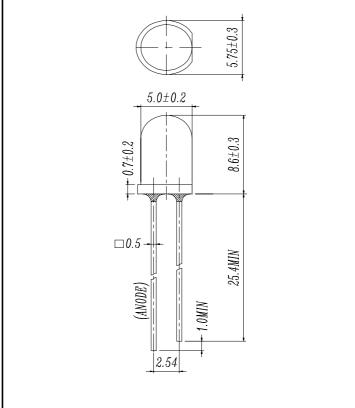
Descriptions:

- 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 ±0.25mm.

| PART NO | Chip | | Lens Color |
|-----------|----------|---------------|-------------|
| | Material | Emitted Color | |
| 1383GD/T2 | GaP | Green | Water Clear |

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http://www.everlight.com



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■ Absolute Maximum Ratings at $Ta = 25^{\circ}C$

| Parameter | Symbol | Rating | Unit | |
|--|----------|-------------|------------------------|--|
| Forward Current | IF | 30 | mA | |
| Operating Temperature | Topr | -40 to +85 | $^{\circ}\!\mathbb{C}$ | |
| Storage Temperature | Tstg | -40 to +100 | $^{\circ}\!\mathbb{C}$ | |
| Soldering Temperature | Tsol | 260 ± 5 | $^{\circ}\!\mathbb{C}$ | |
| 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. | Тур. | Max. | Unit | Condition | |
|------------------------------|---------|-------|------------|------------|------|--|--|
| Luminous Intensity | Iv | 1.0 | 5.5 | | mcd | IF= 2 mA | |
| Viewing Angle | 2 θ 1/2 | / | 30 | / | deg | IF= 20 mA | |
| Peak Wavelength | λp | / | 565 | / | nm | IF= 20 mA | |
| Dominant Wavelength | λd | / | 570 | / | nm | IF= 20 mA | |
| Spectrum Radiation Bandwidth | Δλ | / | 30 | / | nm | IF= 20 mA | |
| Forward Voltage | VF | / 1.7 | 1.8 2.1 | 2.2 2.4 | V | $IF = \begin{array}{c} 2 \\ 20 \end{array} mA$ | |
| Reverse Current | IR | | | 10 | μΑ | VR= 5 V | |

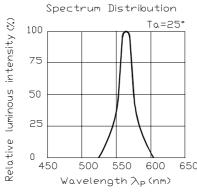


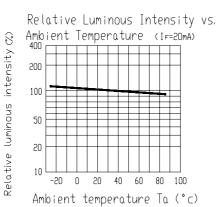
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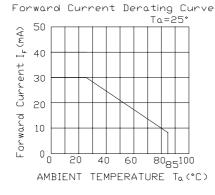
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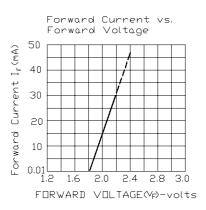
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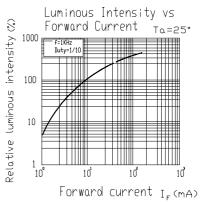
■ Typical Electro-Optical Characteristic Curves:

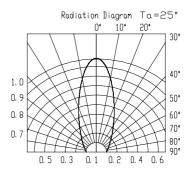














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■ Reliability test items and conditions:

| No | Item | Test Conditions | Test Hours/Cycle | Sample Size | Ac/Re |
|----|-------------------------------------|--|---------------------|-------------|-------|
| 1 | Solder Heat | TEMP : 260° C ± 5 $^{\circ}$ 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 | $H: +100^{\circ}\mathbb{C}$ 5min \int 10 sec $L: -10^{\circ}\mathbb{C}$ 5min | 50 CYCLES | 76 PCS | 0/1 |
| 4 | High Temperature Storage | TEMP : 100℃ | 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 |