



Snowdragon Industrial Co.,Ltd

DATA SHEET

MODEL No : **SDL500FCD-0-DO-C**

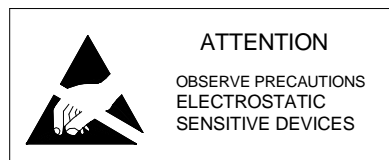
ENG. No:

Description:

- 5mm Round
- Lens Color: Water clear
- Emitting Color: Green
- No Stopper
- Viewing Angle :15°

DiceMaterial: InGaN

| PREPARED BY | CHECKED BY | APPROVED BY |
|-------------------------------------|------------|-------------|
| | | |
| CUSTOMER APPROVED SIGNATURES | | |
| | | |



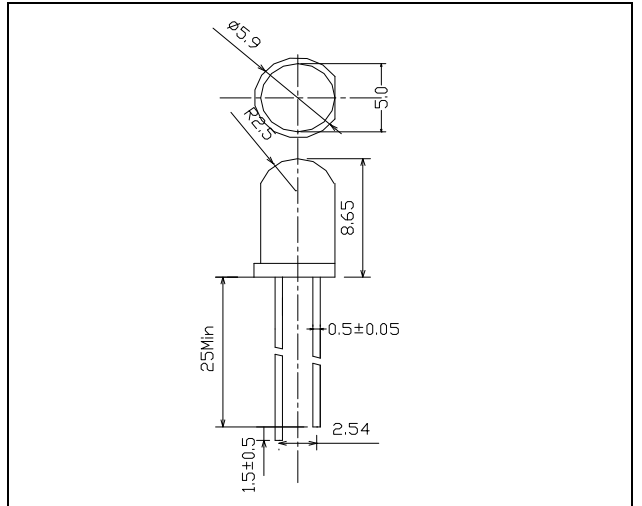
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| MODEL No : | SDL500FCD-0-DO-C |
| ENG. No: | |

Applications:

Dimension Drawing

Absolute Maximum Ratings at Ta = 25°C

| Items | Symbol | Absolute maximum Rating | Unit |
|----------------------------|------------------|---|------|
| Forward Current | I _F | 25 | mA |
| Peak Forward Current* | I _{FP} | 100 | mA |
| Reverse Voltage | V _R | 5 | V |
| Power Dissipation | P _D | 100 | mW |
| Operation Temperature | T _{opr} | -20 ~ +75 | °C |
| Storage Temperature | T _{stg} | -30 ~ +80 | °C |
| Lead Soldering Temperature | T _{sol} | Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb) | |



Notes:

1. All dimensions are in mm, Tolerance is ±0.25mm unless others noted
2. An epoxy meniscus may extend about 1.5mm
3. Burr around bottom of epoxy may be 0.5mm max

*pulse width <=0.1msec duty <=1/10

Typical Electrical & Optical Characteristics (Ta = 25°C)

| Items | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------|-----------------------|-----------------------|------|-------|------|------|
| Forward Voltage | V _F | I _F = 20mA | 2.8 | 3.2 | 3.6 | V |
| Reverse Current | I _R | V _R = 5V | --- | --- | 10 | μA |
| Wavelength | λ _D | I _F = 20mA | --- | 520 | --- | nm |
| Luminous Intensity | I _V | I _F = 20mA | --- | 28000 | --- | mcd |
| 50% Power Angle | 2θ _{1/2} H-H | I _F = 20mA | --- | 15 | --- | deg |
| | 2θ _{1/2} V-V | I _F = 20mA | --- | --- | --- | deg |

| Rank | Luminous Intensity(mcd) | Rank | Luminous Intensity(mcd) | Rank | Luminous Intensity(mcd) |
|------|-------------------------|------|-------------------------|------|-------------------------|
| / | / | / | / | / | / |

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by Snowdragon.
- 2) Tolerance of measurement of luminous intensity is ±15%.
- 3) Tolerance of measurement of dominant wavelength is ±1nm.
- 4) Tolerance of measurement of Vf is ±0.05 V.
- 5) Packaging methods are available for selection, please refer to PACKAGING STANDARD.
- 6) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

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Typical Optical-Electronic Characteristic Curves

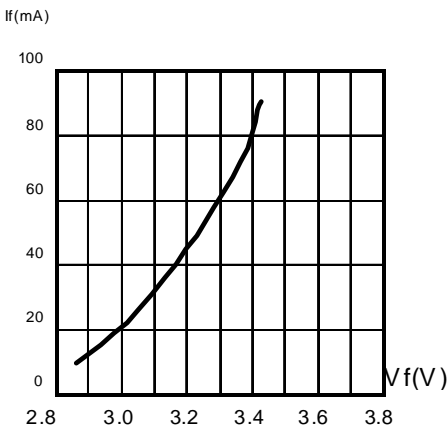


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

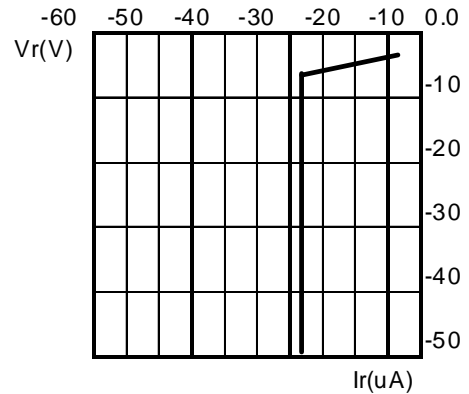


Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

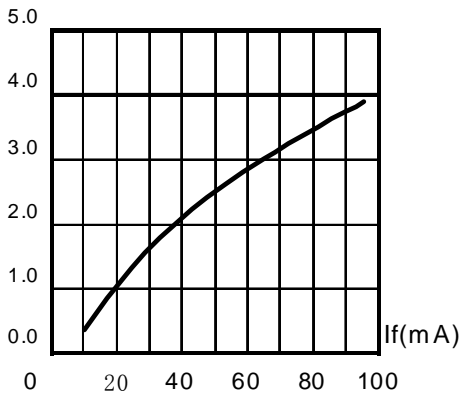


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

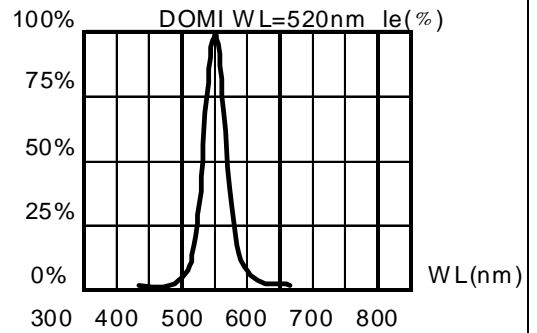


Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

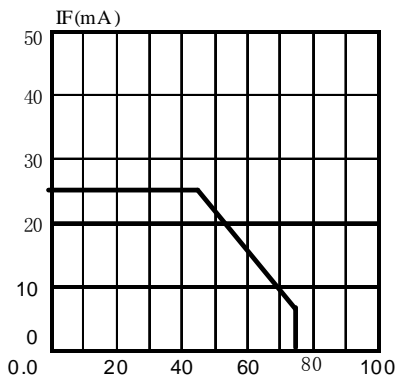


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE(Tjmax=105°C)

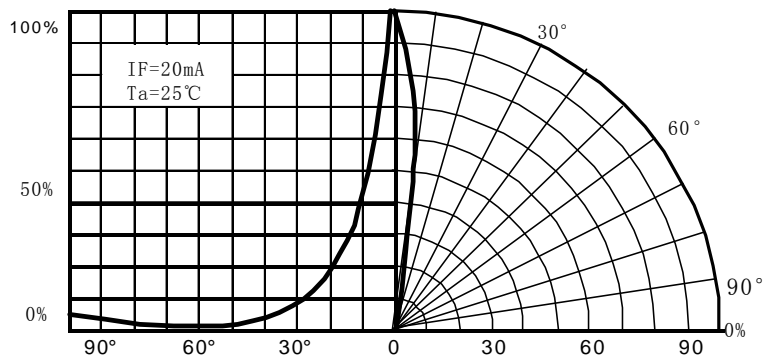


Fig.6 FAR FIELD PATTERN