



# Snowdragon Industrial Co.,Ltd

## DATA SHEET

**MODEL No :** SDL301YWX-0-SI-Q

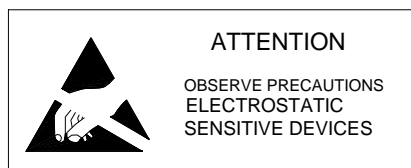
**ENG. No:**

Description:

- 3mm Cylindrical LEDs
- Lens Color: Diffused
- Emitting Color: Yellow
- Viewing Angle :120°
- No Stopper

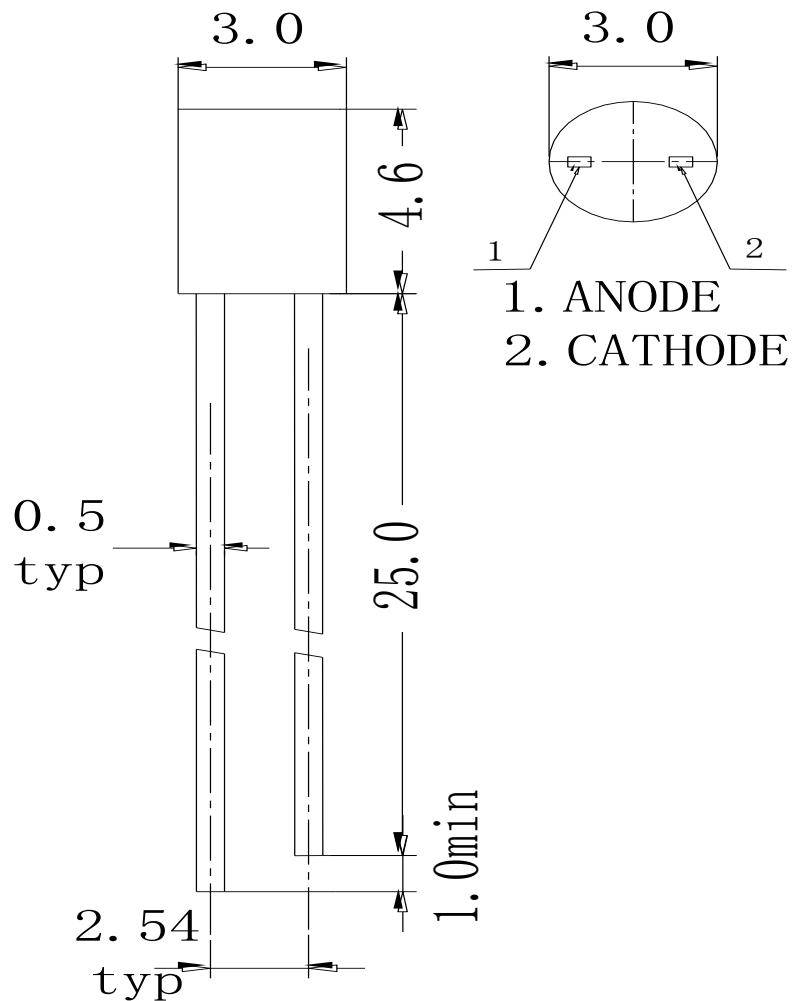
Dice Material: AlGaInP

PREPARED BY	CHECKED BY	APPROVED BY
<b>CUSTOMER APPROVED SIGNATURES</b>		





## PACKAGE DIMENSIONS



### Note:

1. All Dimensions are in millimeters
2. Tolerance is  $\pm 0.25\text{mm}$  ( $0.010''$ ) Unless otherwise specified.
3. Protruded resin under flemge is  $1.5\text{mm}$  ( $0.59''$ ) max.
4. This product to static electricity sensitive, Usage the hour please watch for the electricity aegis.



### Device Selection Guide

Emitting Color	Lens Type
Yellow	Diffused

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Max	Unit
Power Dissipation	P <sub>D</sub>	100	mW
Continuous Forward Current	I <sub>F</sub>	25	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature Range	Topr	-40°C to+80°C	
Storage Temperature Range	Tstg	-25°C to+100°C	
Lead Soldering Temperature 【3mm From Body】	Tsol	260°C For 5 Seconds	

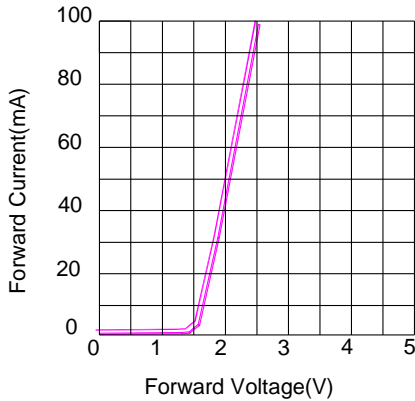
### Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Forward Voltage	V <sub>F</sub>	1.9	---	2.5	V	I <sub>F</sub> =20mA
Luminous Intensity	I <sub>V</sub>	80	---	200	mcd	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	590	---	593	nm	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	/	/	10	μA	V <sub>R</sub> =5V
Viewing Angle	2θ <sub>1/2</sub>	/	120	/	deg	I <sub>F</sub> =20mA

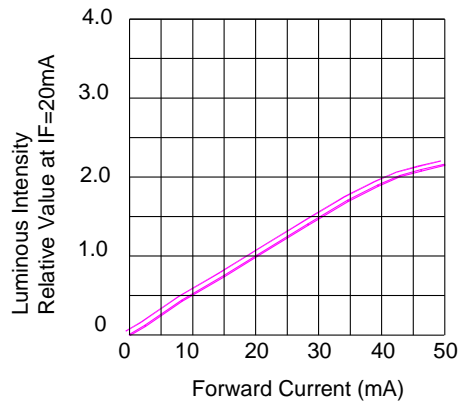


## Typical Electro-Optical Characteristics Curves

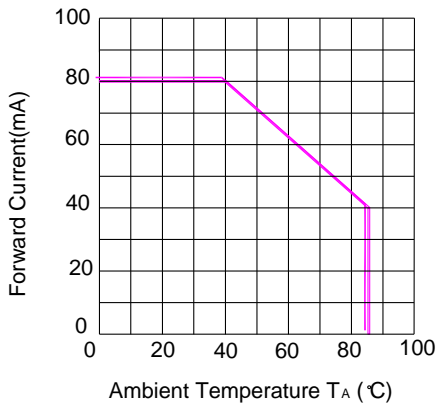
**Relative Luminous Intensity vs Forward Current,  $T_{Ambient}=25^{\circ}C$**



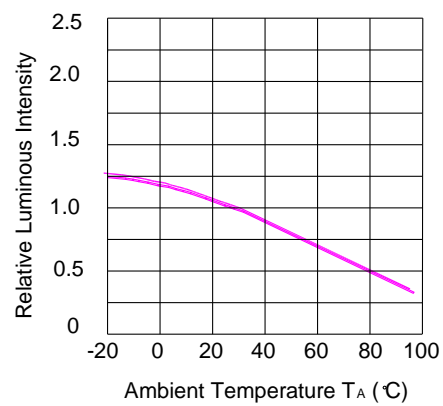
**Relative Luminous Intensity vs Forward Current,  $T_{Ambient}=25^{\circ}C$**



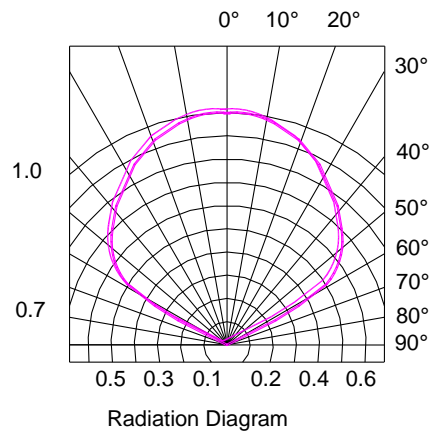
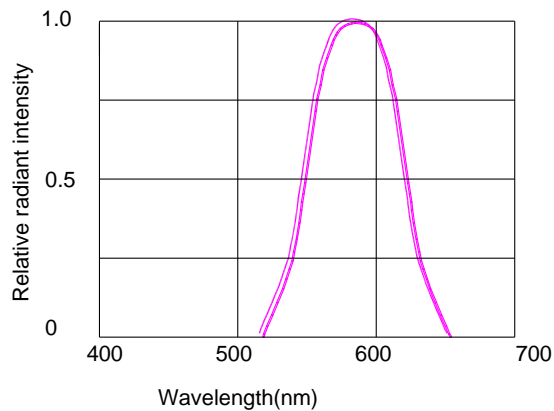
**Forward Current Derating Curve, Derating based on  $T_{jMAX}=85^{\circ}C$**



**Luminous Intensity VS Ambient Temperature**



**Relative Spectral Distribution,  $I_F=20mA$ ,  $T_{Ambient}=25^{\circ}C$**





Reliability test items and conditions :

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Judgment
1	Solder Heat	TEMP: 260±5℃	5 SEC	76 PCS	OK
2	Temperature Cycle	H: +85℃ 30min ┆ 5min L: -55℃ 30min	50 CYCLES	76 PCS	OK
3	Thermal Shock	H: +100℃ 5min ┆ 10set L: -10℃ 5min	50 CYCLES	76 PCS	OK
4	High Temperature Storage	TEMP: 100℃	1000 HRS	76 PCS	OK
5	Low Temperature Storage	TEMP: -55℃	1000 HRS	76 PCS	OK
6	DC Operating Life	TEMP: 25℃	1000 HRS	76 PCS	OK
7	High Temperature / High Humidity	85℃ / 85%RH	1000 HRS	76 PCS	OK

Criteria for Judging the Damage:

Measuring Item	Symbol	Measuring Conditions	Judgement criteria for failure
Forward Voltage	VF	IF=20mA	OVER V* 120% OR 80%
Reverse Current	IR	VR=5V	OVER H*2
Luminous Intensity	IV	IF=20mA	L*0.5
Dominant wavelength	λD	nm	OVER±1.5nm(W)

Note:

1. V and H means the upper limit of specified characteristics. L and W means initial value
2. Measurement shall be taken between 2 hours and after the test pieces have been returned to normal Ambient conditions after completion of each test.



[www.snowdragonledhk.com](http://www.snowdragonledhk.com)

Good quality

---

Technology support or Order ,pls email us :[powerledmanufacturer@gmail.com](mailto:powerledmanufacturer@gmail.com)