

Snowdragon Industrial Co.,Ltd **SHEET** DATA

MODEL N.O.: SD-L0336HRD2-AP

ENG. N.O.: 13050802

Description:

Wavelength: 618- 628nm

■ Luminous Intensity: 910-1210mcd

■ Forward Voltage:2.0V

Viewing Angle:100/50°

Test condition:20mA

PREPARED BY	CHECKED BY	APPROVED BY		
CUSTOMER APPROVED SIGNATURES				







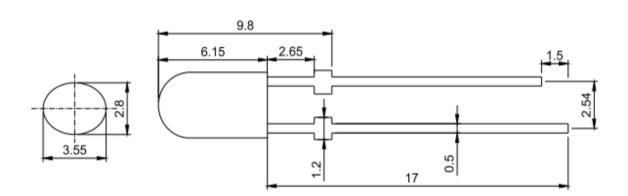
Applications:

- Indoor and outdoor full color display
- Billboards
- Decorative Lighting
- Indicator

Features:

- 3mm Oval LED
- Lens Color: colored mist
- LED Color: Red
- Half-power angle: 100 °
 Chip Material: AlGalnP

Package Dimensions



Note:

- 1. All dimensions are in mm
- If no special instructions tolerance range ± 0.25mm
- Described in the technical data sheet are subject to change without notice.
- The semiconductor device is static sensitive components, wear protective equipment pick up static electricity, all the machines, please do ground handling equipment.



Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Тур.	Max.	Units	Test Conditions
VF [1]	Forward Voltage	Red	-	2.0	-	٧	IF=20mA
IR	Reverse Current		-		1	uA	VR = 9V
λd	Peak wavelength		910	-	1210	mcd	IF=20mA
lv	Luminous intensity		618	-	628	nm	IF=20mA
201/2H-H	Viewing Angle		-	100	-	deg	IF=20mA
201/2V-V	Viewing Angle		-	50	-	deg	IF=20mA

Absolute Maximum Ratings at TA=25°C

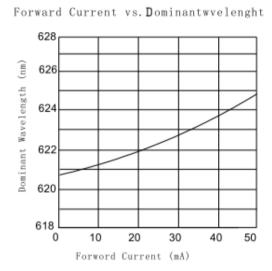
Parameter	Symbol	Maximum size	Units
Power dissipation	PD	110	mW
Reverse Current	IF	30	mA
Peak Forward Current	IFP	100	mA
Reverse Voltage	VR	5	V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

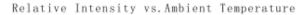
Pulse Width. ≤ 0.1msec ; Duty Cycle ≤1/10

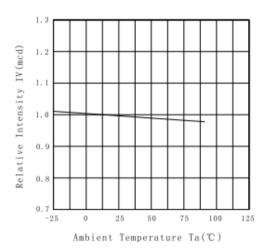
Note:

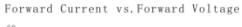
- Product optical performance rating from our discretion, the optical properties of different grades of products vary, customers use to decide according to one's own use.
- 2) Tolerance of measurement of luminous intensity: ± 10%.
- Forward voltage measurement tolerance: ± 0.1V.
- See for the safe use of 5 to 6.
- Packaging Notes Please refer to page 6
- 6) We have been working to improve the performance of LED products, specifications are subject to change without notice.

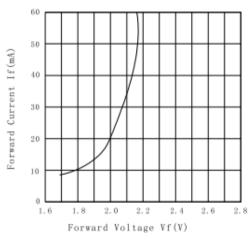
Typical light - electric curve:



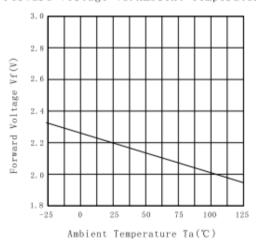


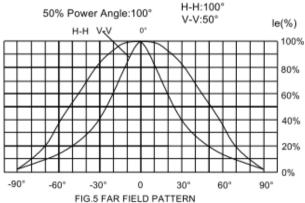


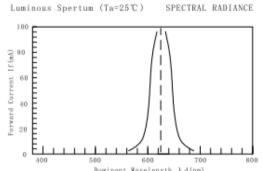




Forward Voltage vs. Ambient Temperature







Caution:

Purpose:

This document describes the main customers and users on how to better use ourLED products. Instructions for use:

In general, LED semiconductor with the same general usage. When using the LEDproduct, please observe the following to use to protect the product.

1. cleaning methods:

Do not use an unknown chemical liquid cleaning products: an unknown chemical liquid may damage the product. When necessary, cleaning, wipe the product with alcohol, and natural drying for 15 minutes, then get started.

2. Anti-moisture packing method:

In order to avoid transportation and storage of products in the moisture, the productpackaging is packed with moisture-proof aluminum bags, and bags which containsdesic-cant, desiccant bags packed the main play control of the humidity.

3. Storage:

A. stored in sealed bags conditions of temperature 10-30 °C, humidity 40-70% RH, please try to use within 3 months due to improper pin to prevent the oxidation of preservation.

B. exposure led to wear wrist strap is required to wear anti-static-static shoes orgloves, work surfaces should also grounded, promptly after the opening sealed bagsto prevent the pin oxidation.

- 4. Plug-in ESD protection, please note that:
 - A. indecent machine before production equipment grounding line is working.
 - B. inspectors static ring is normal, check whether the static ring close contact withhuman skin.
 - C. In the plug-in required operator is best to wear gloves or a good static static finger sets.
- D, job requirements laid table static tape, adhesive tape between the ground should be connected to each other.

E, Kaifeng, please run out within 24 hours, or feet may cause oxidation of light rust.

5. welding line type led in four ways: manual welding, automatic welding, soldering tin stove, the peak soldering:

Manual Welding: General Electric ferrochromium temperature set at about 315 $^{\circ}$ C, welding time is not more than 5 seconds, the best in 3 seconds, no more than three times the number of welding. Electrical ferrochrome temperature selectioncomponents are generally based on tin wire may be, is not Unchanged.

Wave soldering: It is now more advanced welding, to selection of flux have different requirements, different types of flux, with different finish on the solder joint, preheat the length of time between the welding quality is also often point inspection tin surface Tinsolution to regular replacement, the temperature to adjust the ingredients according to the tin, but the maximum should not exceed 260 $^\circ$ ± 5 $^\circ$, the maximum time should not exceed 5 seconds. point inspection tin solution temperature, select the appropriate flux, should always clean the tin leaf Surface liquid.

Time units to be welded above the ground, machine-static should not exceed 30v,human body static electricity does not exceed 50v. Manual welding would be best to use chrome heated electric iron. in the cold and dry environment to minimize theworkshop personnel move, to avoid static electricity.



- 6.LED With the current increase and temperature, its life will fall into the curve, especially with increasing temperature the reverse leakage current, leakage currentwill be significantly increased, resulting in reduced life LED, please refer to our products The specification of the current temperature corresponding to the curve.
- 7. the use of white light when particular attention to:
- A. Different levels of white light can not mix, especially in areas of different color, or light color will appear uneven situation.
 - B. forward voltage is not the same level can not be strung together to use.
 - C. recommend the use of constant current drive LED, to ensure its service life.
- 8. LED in forming, bending light foot, light foot bent to the gel point at least 3mm from the bottom; not in the welding or soldering the bending light foot, the foot if you have tobend light, in the welding before.

9.Packaging

- 1) The box is not waterproof, and must make them away from water and moisture.
- General anti-static bag or bags LED, the last use of cardboard boxes for packaging.
- 3) The use of cartons during transport to prevent collision damage due to externalLED.
- 4) The amount of packaging bag of 2000 pcs.
- 5) 38pcs bags used for packaging into cartons.

