www.snowdragonledhk.com Good quality & Fast delivery

Snowdragon Industrial Co.,Ltd

DATA SHEET

MODEL N.O.: SD-S1010FCECH-AP

ENG. N.O.: 13050901

Description:

- **Color: Full Color**
- **Size: 1.1*1.0mm Surface mount**
- **Luminous Intensity: R:110mcd B:50mcd G:250mcd**
- **Lens Color: Clear lucite**
- **Viewing Angle:115°**

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		

Technology support or Order ,pls email us :powerledmanufacturer@gmail.com

www.snowdragonledhk.com Good quality & Fast delivery

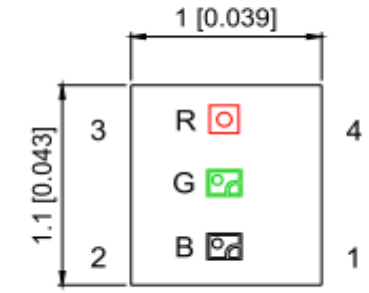
Applications

- Indicator light
- LED indoor lighting and outdoor lighting
- LCD backlight
- Decorative Lighting
- Auto Meter LED decorative lighting

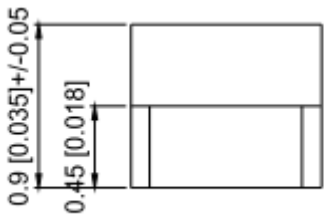
Features

- 1.1 × 1.0mm Surface Mount LEDs
- Lens Color: clear lucite
- Color: full color
- Viewing Angle : 115°
- Chip Material: AlGaInP&InGaN

Package Dimensions

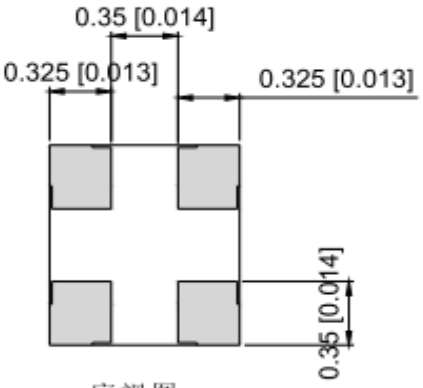


顶视图

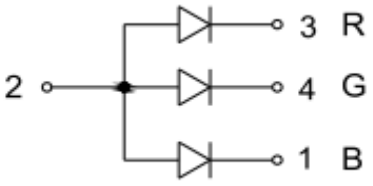


下视图

Recommended Soldering Pattern



底视图



Note:

1. All dimensions are in mm
2. If no special instructions tolerance range ± 0.1mm
3. Described in the technical data sheet are subject to change without notice.
4. The semiconductor device is static sensitive components, wear protective equipment pick up static electricity, all the machines, please do ground handling equipment.

Technology support or Order ,pls email us :powerledmanufacturer@gmail.com

Electrical / Optical Characteristics at TA=25°C

color	Wavelength (nm)	luminous intensity (mcd)			I_R countercurrent (uA)	test condition	Lighting Angle (Typ.)	direct voltage (Typ.)
	(Typ.)	Min.	Typ.	Max.	V_R = 9V 时			
Red	620-630	—	110	—	1	20MA	115°	1.9-2.2
Blue	465-475	—	50	—	1	10MA	115°	2.8-3.4
Green	520-530	—	250	—	1	20MA	115°	2.9-3.5

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

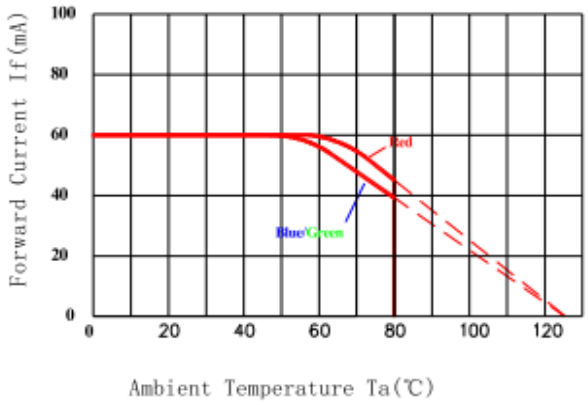
Note:

1) 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%.
3) Forward voltage measurement tolerance: ± 0.1V.
4) Tolerance of measurement of color coordinates: ± 0.015.
5) See for the safe use of 5 to 6.
6) Packaging Notes Please refer to page 7
7) We have been working to improve the performance of LED products, specifications are subject to change without notice.

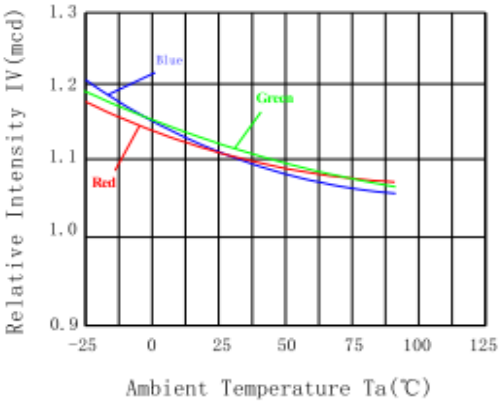
Technology support or Order ,pls email us :powerledmanufacturer@gmail.com

Typical light - electric curve:

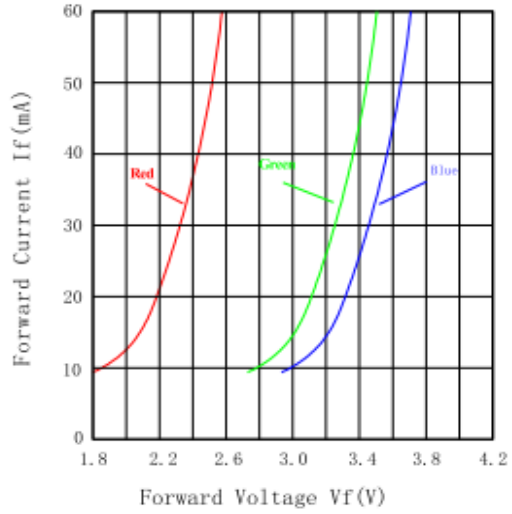
Forward Current vs. Ambient Temperature



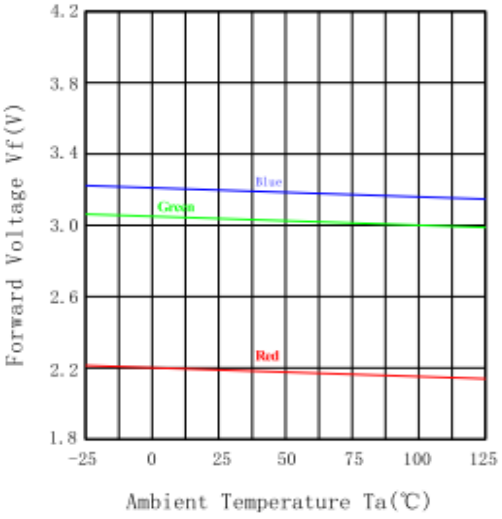
Relative Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



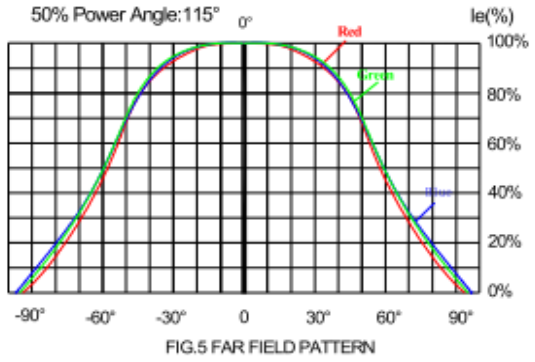
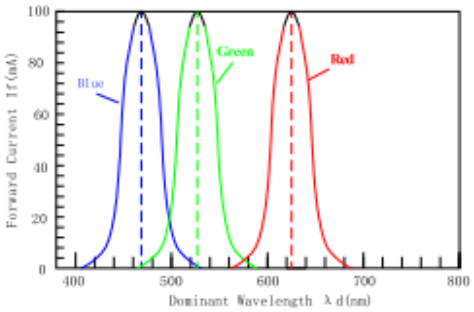


FIG.5 FAR FIELD PATTERN

Luminous Spertum (Ta=25℃) SPECTRAL RADIANCE



Caution:

The main purpose of this document to the customers and users about how to better use our TOPLED products. For use in general, TOPLED the same with the average usage of the semiconductor. When using TOPLED product, please observe the following to protect the product to use.

1. Cleaning

Cleaning methods do not use an unknown chemical liquid cleaning products: unknown liquid-chemicals may damage the product. When cleaning is necessary, the product immersed in alcohol, in normal room temperature of less than 1 minute and air dry for 15 minutes, then get started.

2. Moisture proof packaging

Anti-humidity packaging products in order to avoid transportation and storage of moisture in the product packaging is packed with moisture-proof aluminum bags, and which contains desiccant bags, desiccant bags packed the main play control of the humidity.

3. Storage

A. sealed bags stored in conditions of temperature <40 ℃, humidity <90% RH, storage period of 12 months. When more than shelf life, the need to re-baking dehumidification.

B. Before the open packaging, check whether the bags leak, if there is leakage phenomenon, re-baked before use.

C. After opening, please use the following conditions: temperature <30 ℃, humidity 60% RH below; If you use longer than 24 hours, subject to the following baking before use.

D. Curing conditions: oven at a temperature of products in the 70 ℃ ± 5 ℃; relative humidity ≤ 10% RH, time: 24 hours. E. out from the bag and baked products. In the baking process can not open the oven door.

4. ESD&EOS

A. ESD electrostatic discharge and impact of current (ESD) or pulse current (EOS), may damage SMD LED.

B. Must wear a wrist strap, to wear anti-static-static shoes or gloves, can the SMD LED production.

C. All mechanical equipment must be grounded.

5. Heat treatment

SMD product heat treatment heat treatment in SMD circuit design, careful consideration, the current should reduce the specific reference to the appropriate specifications of each product's current book - the temperature corresponding to the curve.

6. Welding

Manual welding operations:

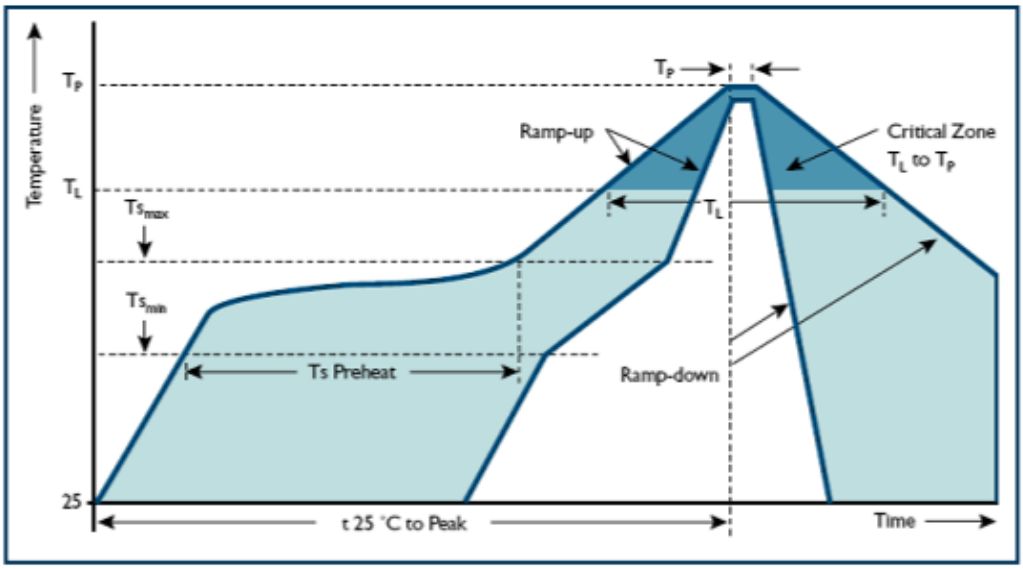
A. Use the soldering iron must be less than 25W, soldering iron temperature must be kept below 315 ℃, soldering time must not exceed 2 seconds.

B. Iron can not come into contact with epoxy resin (silicone) section.

C. Once when welding, to let it cool down to temperatures below 40 ℃ can packaging.

Reflow soldering operation:

A. Reflow temperature profile had Refer to the following:



Solder: Lead solder	Solder: lead-free solder
The temperature rise slope Tsmax to TP = 4 ℃ / s maximum	The temperature rise slope Tsmax to TP = 4 ℃ / s maximum
Preheating temperature Tsmin = 100 ℃ ~ 150 ℃	Preheating temperature Tsmin = 150 ℃ ~ 200 ℃
Preheating time Tsmin to Tsmax = 100s maximum	Preheating time Tsmin to Tsmax = 100s max.
Ramp-down rate 6 ℃ / s maximum	Ramp-down rate 6 ℃ / s maximum
Peak temperature TP = 230 ℃ maximum	Peak temperature TP = 250 ℃ maximum
At the time of peak temperature must not exceed ± 5 ℃ 10s	At the time of peak temperature must not exceed ± 5 ℃ 10s
More than 183 ℃ temperature could not exceed 80s.	More than 217 ℃ of temperature for longer than 80s.

B. Do not weld the welding surface after modification, so if you want to modify the product must not harm the premise.

C. reflow should be done at a time, not min repeated.

D. In the welding, the circuit board packaging can not be immediately, to let it cool before packaging.