RoHS

Specification

Client Name _____

Client P/N _____

Product P/N HL-C3535F7V365-D1-LVR9(Au120)

Sending Date _____

Client approval		Hongli approval		
Approval	Audit	Approval	Audit	Confirmation
□ Qualified □ Disqualified □		DATE: 2016.05.16		

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Catalog

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ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Under Development	
Mass production	●

Product naming rules

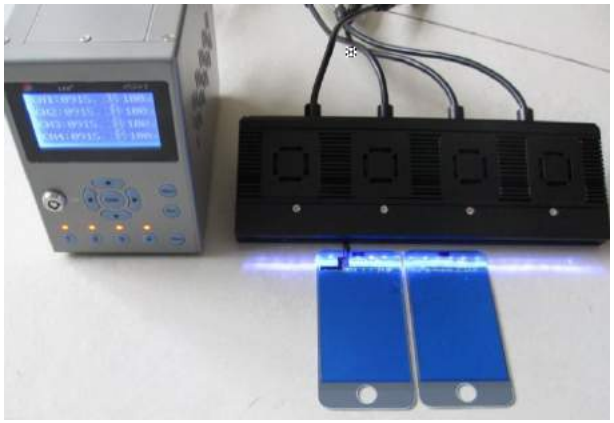
HL-	C	3535	F7	V	365	–D	1	–LVR9	(Au	120)
1	2	3	4	5	6	7	8	9	10	11

1
2
3
4
5
6
7
8
9
10:
11 120°

Features

- Dimension 3.45mm×3.45mm×1.9mm
- Long operating life
- High radiation flux
- Instant light (less than 100ns) 100ns
- Low voltage DC operated
- High heat dissipation efficiency
- Superior ESD protection
- RoHS compliant RoHS

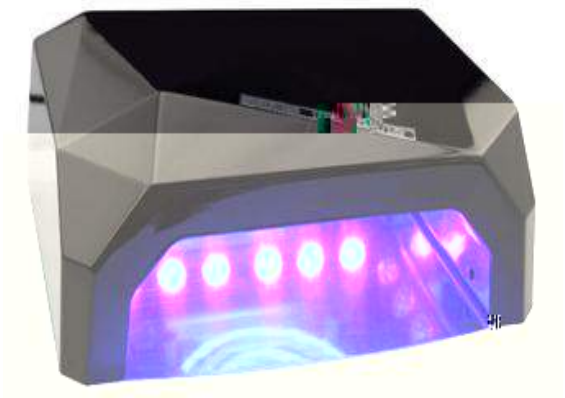
Application range



UV
UV Curing

UV
UV Printing

UV
UV Exposure

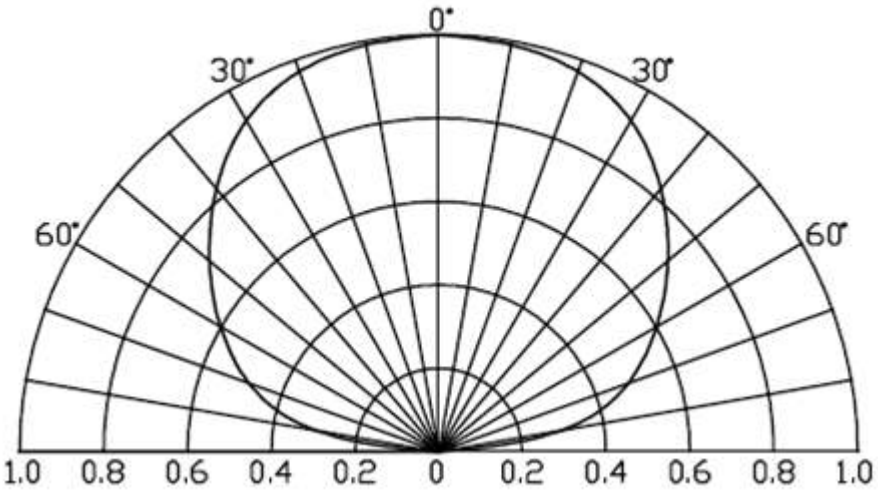


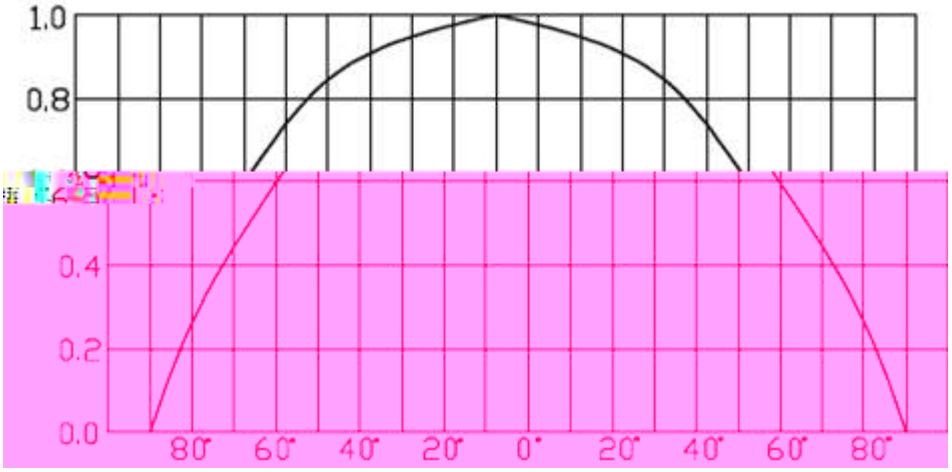
Nail Polish Curing

Security, Banknote

Mosquito Killer

Radiation Pattern





Typical Optical/Electrical Characteristics @Ta=25ÁC Type

Symbol	Item	Min.	Typ.	Max.	Units	Test Conditions
Φe	Radiation Flux辐射功率	350	400	—	mW	IF=500mA
VF	Forward Voltage 正向电压	3.0	—	4.0	V	IF=500mA
λ_P	Peak Wavelength	360	—	370	nm	IF=500mA
$2\theta_{1/2}$	50% Power Angle	—	120	—	deg	IF=500mA
IR	Reverse Current	—	—	50	uA	VR = 5V
L50	Life Time	—	3000	—	Hour	IF=500mA
L50	Life Time	—	1500	—	Hour	IF=700mA

Absolute Maximum Ratings 绝对最大额定值@TA=25ÁC

Item名称	Symbol 符号	Absolute Maximum Rating 绝对最大额定值	Units
Power dissipation	Pd	2.8	W
Peak Forward Current	I_{Fp}	700	mA
Reverse Voltage	V_R	5	V
Operating Temperature	Topr	-20°C To +60°C	
Storage Temperature	Tstg	0C To +40°C	

Notes注:

1.Radiant flux measurement tolerance:±10%;

2.Forward voltage measurement tolerance:±3%;

3.Peak wavelength measurement tolerance:±3nm;

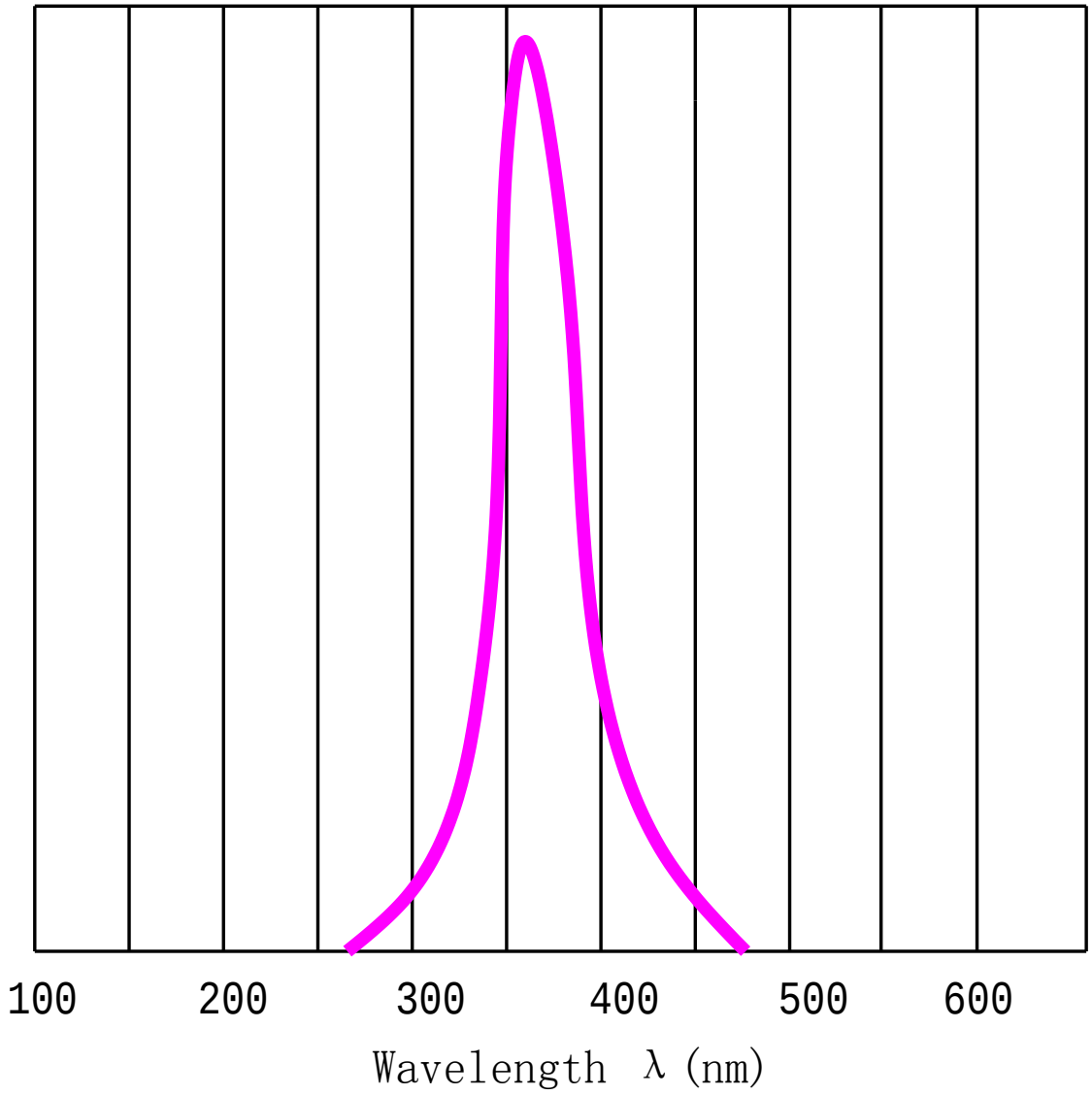
4.1/10 Duty Cycle,0.1ms Pulse Width.1/10占空比，0.1ms脉冲宽度;

5.The temperature of Aluminum PCB do not exceed 55℃.基板温度不超过55℃。

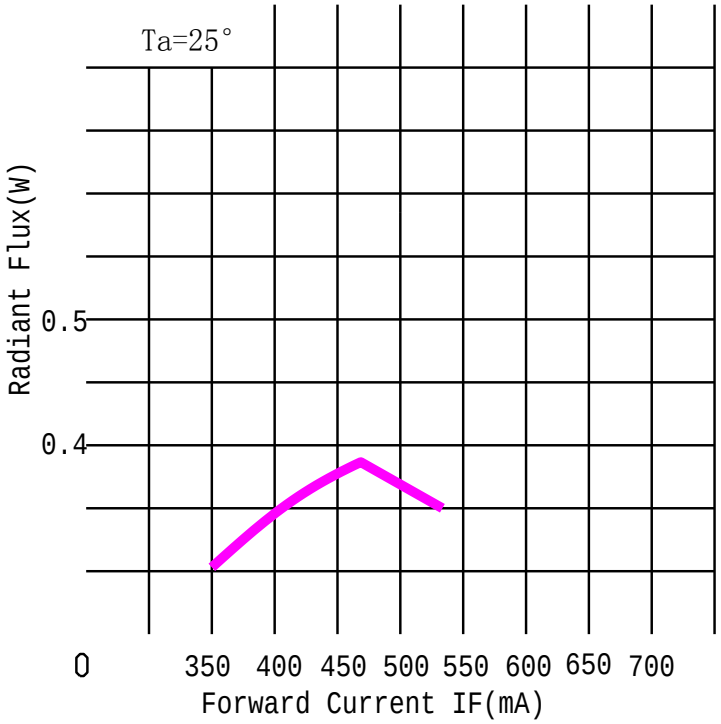
Typical Optical/Electrical Characteristics Curves (T_a=25℃ Unless Otherwise Noted)

典型光学/电性特征曲线（T_a=25℃ 除非另有注释）

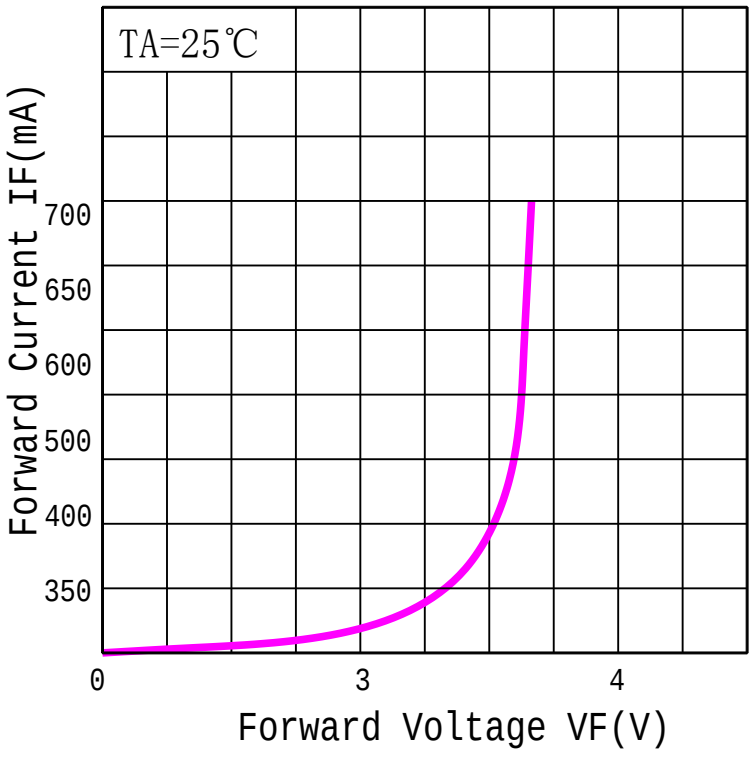
(1) Wavelength Characteristics



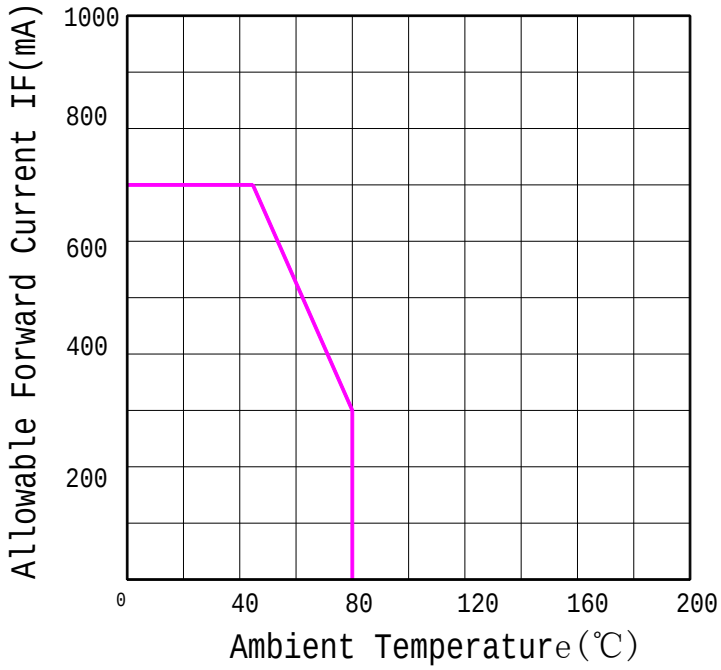
(2) Relative Radiation Flux-IF



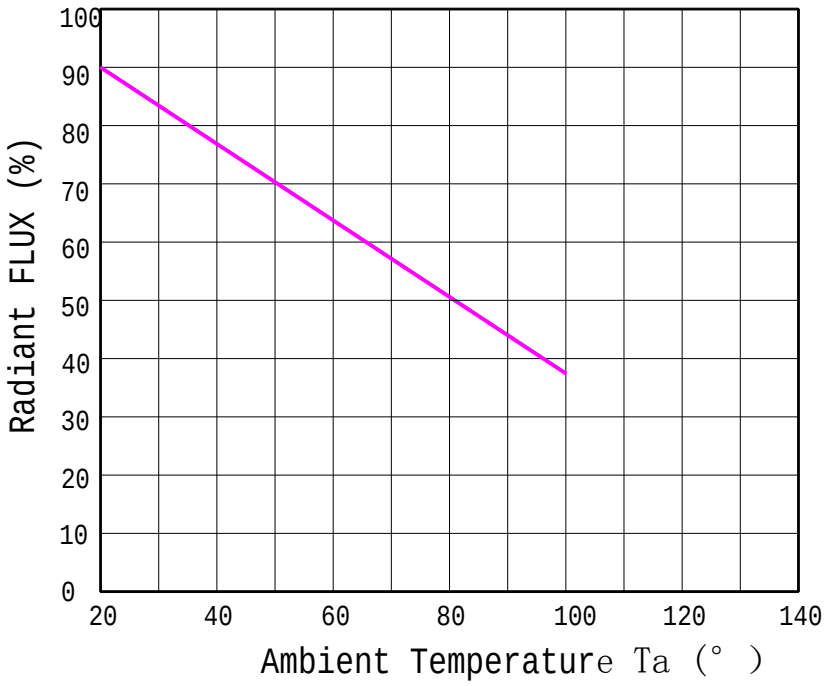
(3) Relative IF-VF



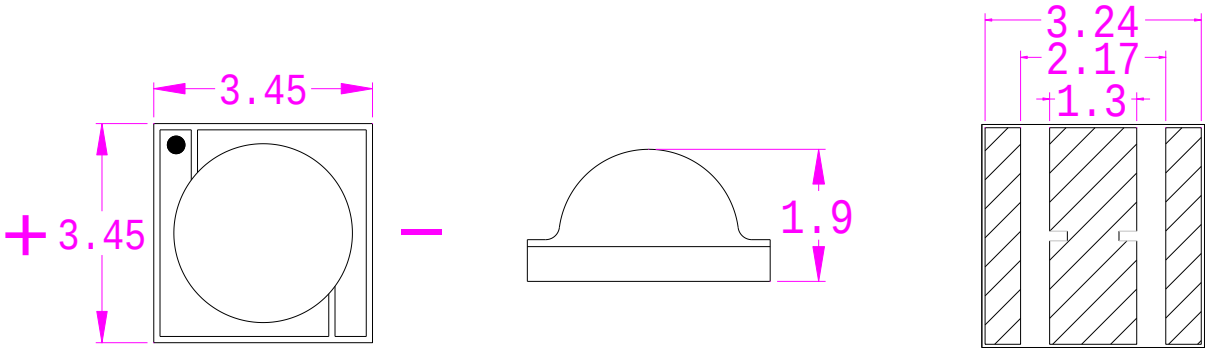
(4) Allowable Forward Current-Ta



(5) Radiation Flux-Ta



Package Dimensions



Notes :

1. All dimension units are millimeters.

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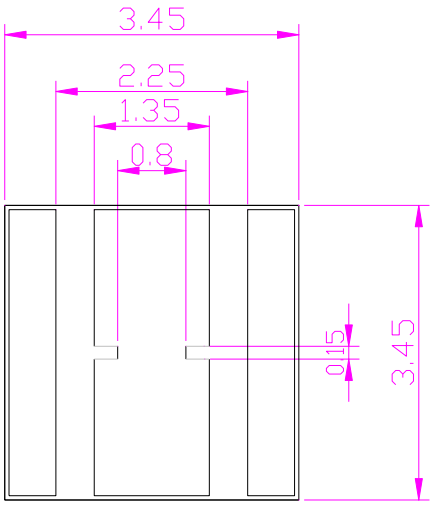
2. All dimension tolerance is ±0.1mm unless otherwise noted.

±0.1

Welded plate Dimensions



Notes :

When the circuit configuration is not affected, suggested the increase in the middle of the copper area, or the connection between the middle and the pad and the negative electrode can improve the cooling performance of the product It is recommended to use 1 mmthickness of steel mask.

1mm

Label

TYPE: XXXXXXXXX

QTY: XXXXX

VF: Forward voltage rank

Φe: Radiation Flux rank

IF: XXXX

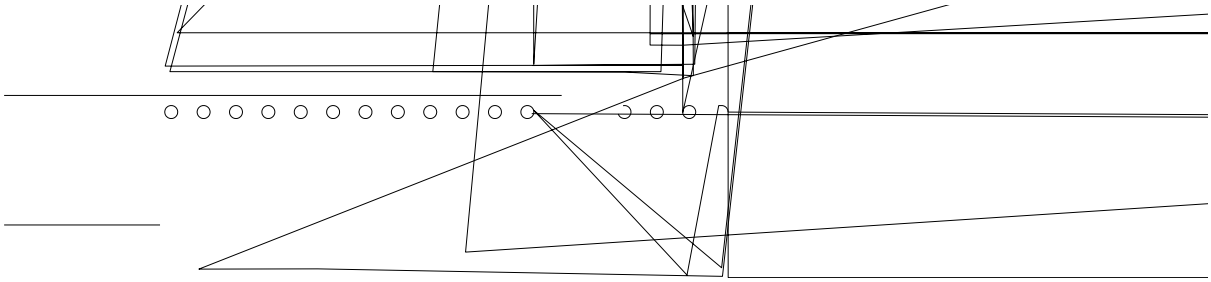
λ_P: Peak Wavelength

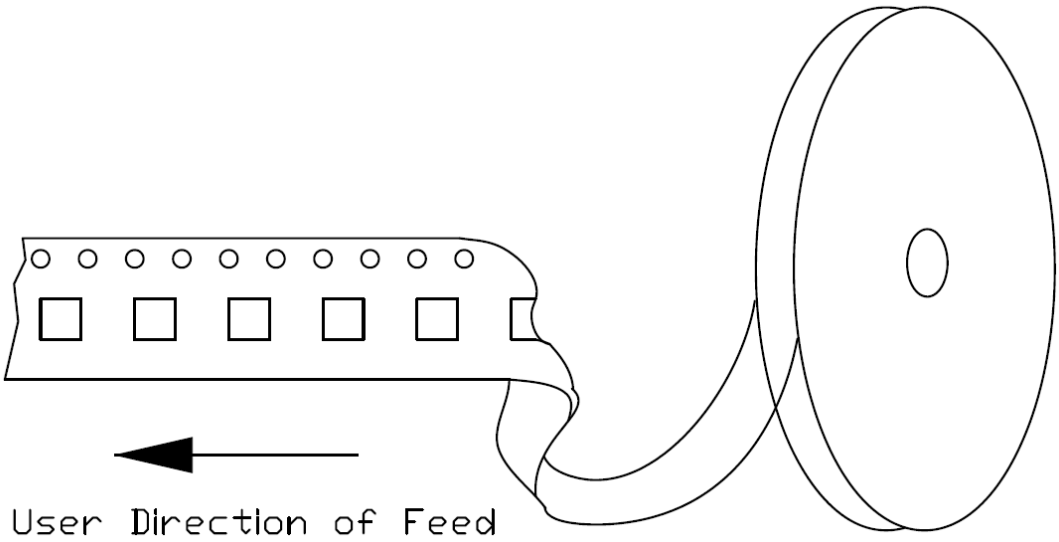
DATE: XXXX

LOT.NO:Lot Number

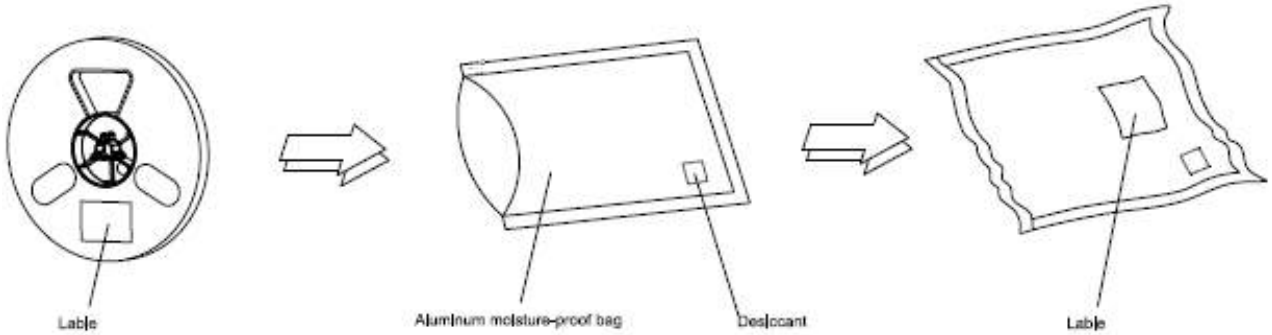
Tape Specifications(Units:mm)

(1)Reel package (1000 pcs/reel) 1000 pcs/





(2)Moisture resistant packaging



Reflow soldering instructions

Profile Feature	Lead-Based solder	Lead-Free Solder
Average Ramp-Rate (Ts_{max} to Tp)		

Note:

1.recommend to use a convection type reflow machine with 8 zones.

145°-165°-185°-210°-220°-240°-260°-240° 90cm/min

2.recommend to use Lead-Free Paste with a melting point between 210℃-220℃.

210℃-220℃

3.the reflow soldering time should not be more than 360s.all temperature means the temperature measured on the surface of the package body.

360s

4.When using hot plate, the temperature is no more than 260 ℃, the time is not more than 5 seconds.

260 5

Use the matters needing attention(使用注意事项)

(storage)

5-30℃ 60%

LED 24H

60℃±5℃ 12H

To avoid moisture, we recommend storage conditions for the unopened LED +5 ~ +30 ℃, relative humidity <60%. LED should be used within 168 Hrs. of opening the package. Please make sure to dehumidify and vacuum pack the remaining/ unused LED. Dehumidifying condition: +120 °C ±5 °C, 04 Hrs. Effective age for the sealed led is one year.

(the assembly notes)

, 260℃.

1000g

Soldering Conditions This product must be used reflow soldering practices, the maximum temperature of reflow should not exceed 220℃.Please make sure when soldering, there is no external force on the soldering surface (such as pressure, friction or sharp metal nails, etc.), to avoid gold wire deformation or damage and other abnormalities.
If beyond recommended conditions, we cannot guarantee the LED stability, please do the risk assessment first.

(anti-Static Measures）

Please take adequate measures to prevent electrostatic generation, such as wearing electrostatic ring or anti-static fingerstall etc; any relative products like plant equipment, machinery, carrier and transportation units shall be connected to discharging unit/ ground. After assembly, please make sure to discharge Static Electricity with proper ESD equipment.

(temperature Control）

500V

During assembly, please ensure that a good quality thermal paste is applied and distributed evenly over the surface. While using thermal pad (Heat Sink), make sure LED is firmly tightened and there is no gap between surfaces. The need to ensure the cooling medium dielectric withstand test at least through 500V.

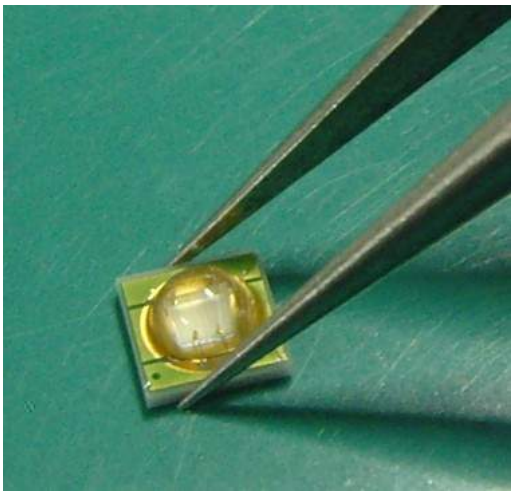
(drive control)

Drive this product at constant current. Output current range specifications should be according to the operational and other conditions, as mentioned in data sheet. Before using a constant voltage source or altered specifications, other than recommended, please consider risk factors.

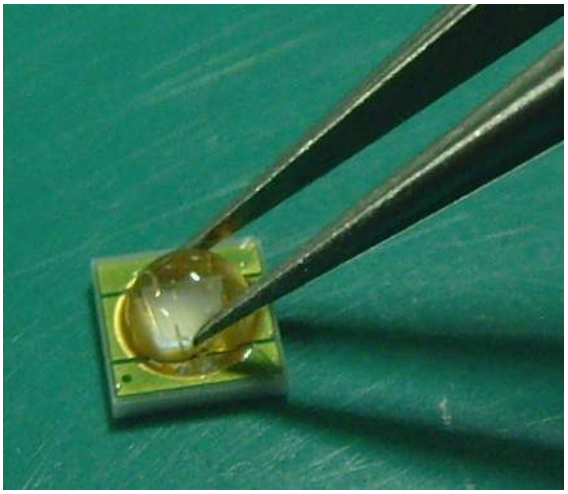
(other)

--- (Cl2,H2S NH3 SOx NOx

Product is not suitable to use in following conditions;
—-Direct or indirect wet / damp conditions, such as rain, etc;
—-in contact with sea water and erosive materials;
—-Exposed to corrosive gases (e.g., Cl2, H2S, NH3, SOx, NOx, etc.);
—-Exposed to dust, liquids or oils;



OK



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Notes注:

1.* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.

LED

, LED 5

2.Reflow soldering should not be done more than two times.The reflow temperature we recommend is 260℃,When the temperature exceeds 260 ℃, the product failure of LED can be caused

, 260 260℃ LED .