

RoHS

Specification

Client Name

Client P/N

Product P/N

HL-C3535F8V385-D1-LVR9(Au120)

Sending Date

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

Catalog

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ATTENTION
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC
 DISCHARGE
 SENSITIVE
 DEVICES

Under Development	<input type="checkbox"/>
Mass production	<input checked="" type="checkbox"/>

Product naming rules

HL-C 3535 F8 V 385 -D 1 -LVR9 (Au 120)

1 2 3 4 5 6 7 8 9 10 11

1

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9

10:

11

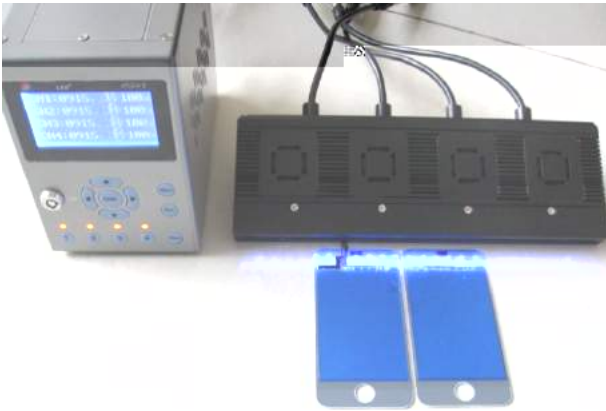
120°

Features

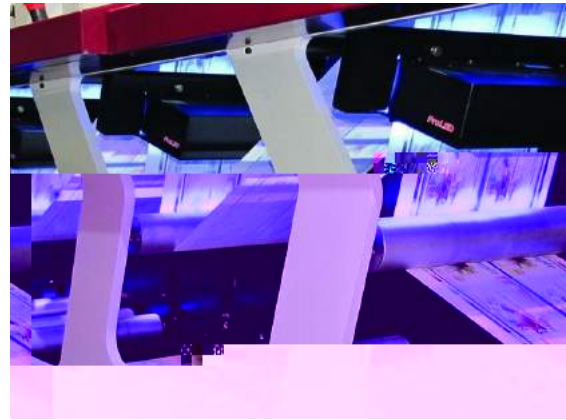
Dimension 3.45mm×3.45mm×1.9mm

Long operating life

Application range



UV
UV Curing



UV
UV Printing



UV
UV Exposure



Nail Polish Curing

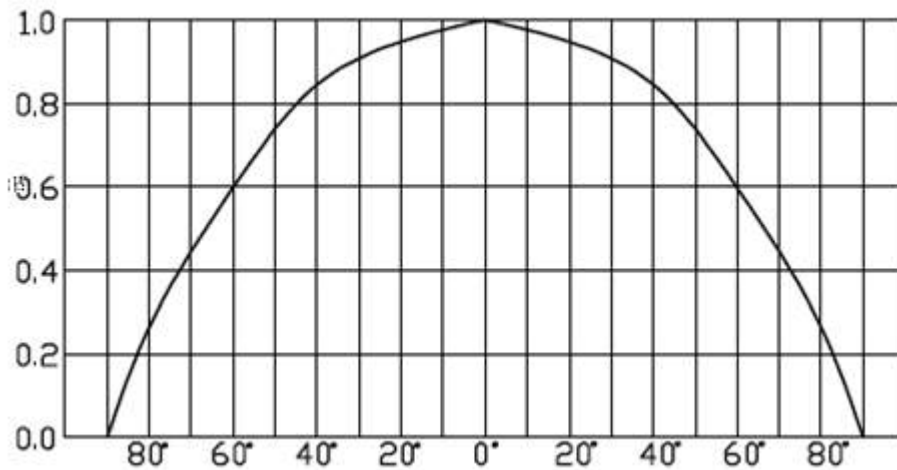
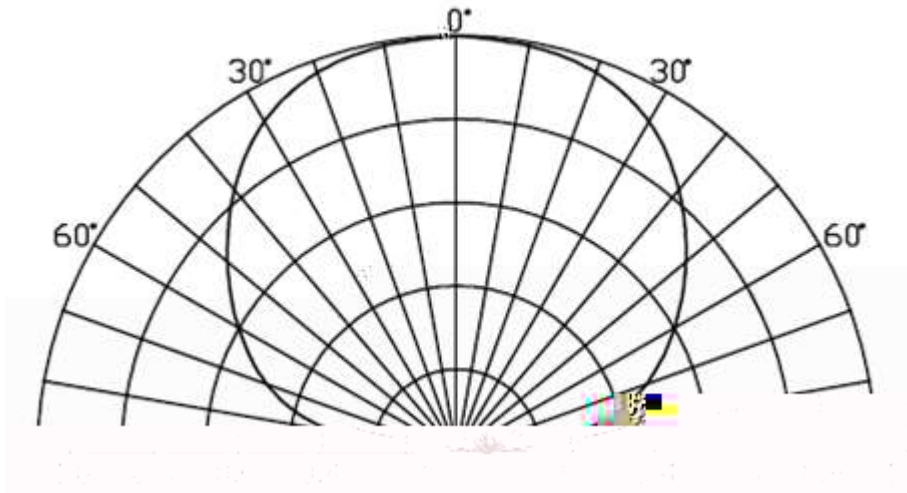


Security, Banknote



Mosquito Killer

Radiation Pattern



Typical Optical/Electrical Characteristics @Ta=25

Symbol	Item	Min.	Typ	Max.	Units	Test Conditions
Φ_e	Radiation Flux 辐射功率	650	700		mW	IF=500mA
VF	Forward Voltage 正向电压	3.0		4.0	V	IF=500mA
λ_p	Peak Wavelength	380		390	nm	IF=500mA
$2\theta_{1/2}$	50% Power Angle		120		deg	IF=500mA
IR	Reverse Current			50	uA	VR = 5V
L50	Life Time		4000		Hour	IF=500mA
L50	Life Time		2000		Hour	IF=700mA

Absolute Maximum Ratings 绝对最大额定值@

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	

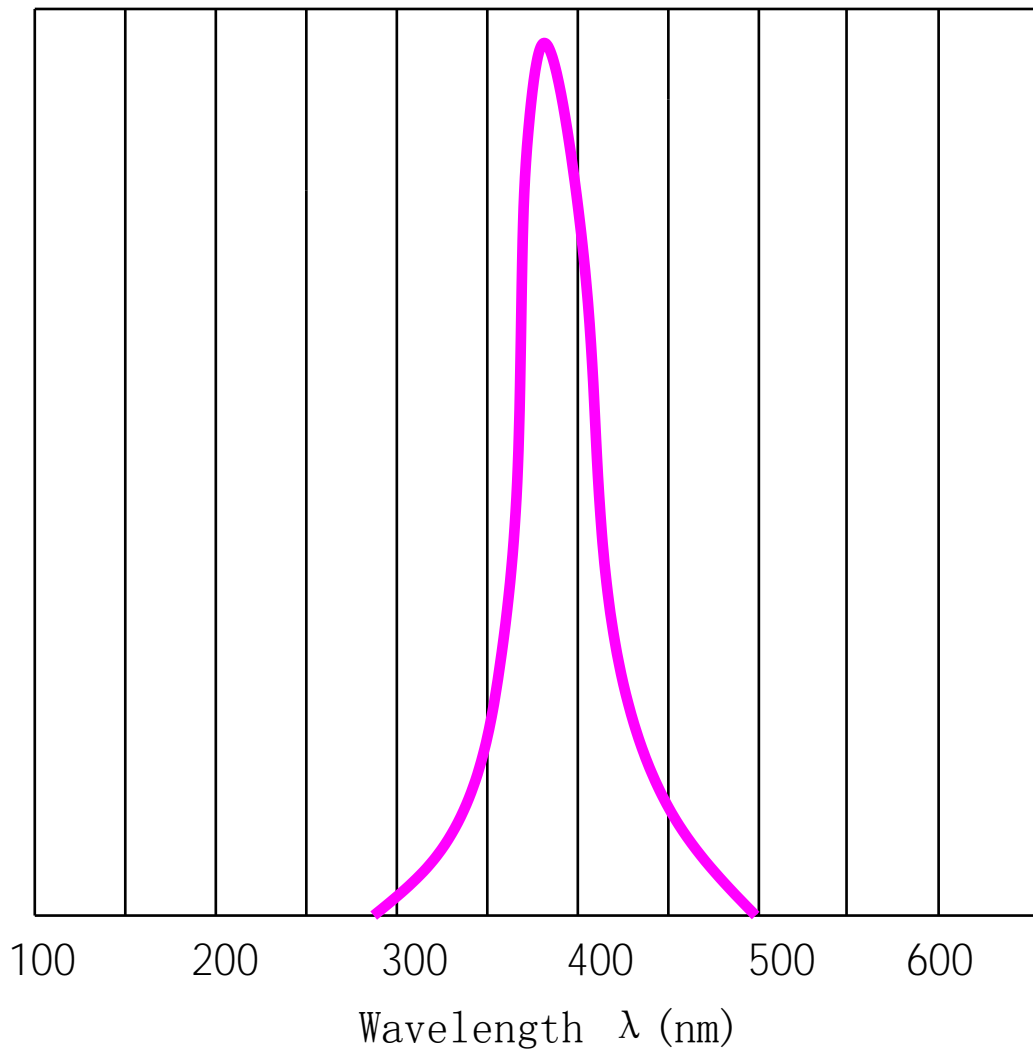
Notes注:

- 4 \pm voltage \pm \pm 占空比, 脉冲宽度; °C.基板温度不超过55°C。

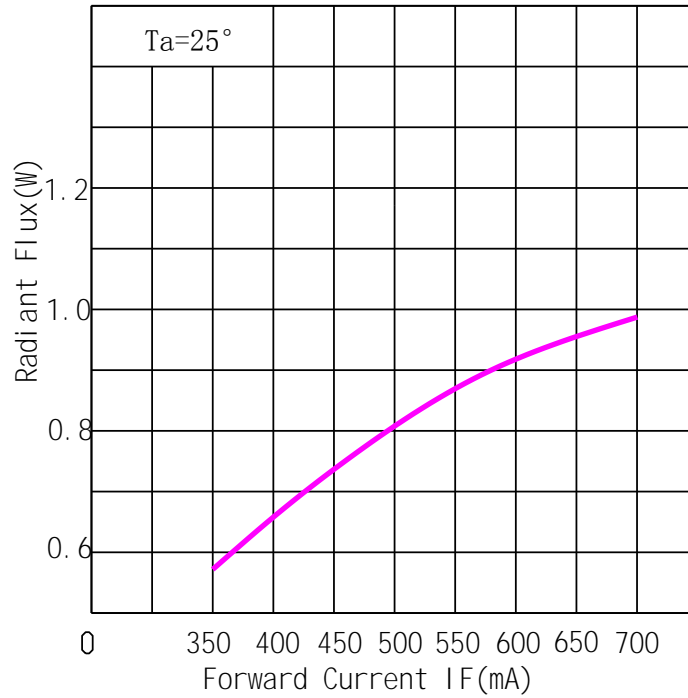
Typical Optical/Electrical Characteristics Curves ($T_a=25^{\circ}\text{C}$ Unless Otherwise Noted)

典型光学/电性特征曲线 ($T_a=25^{\circ}\text{C}$ 除非另有注释)

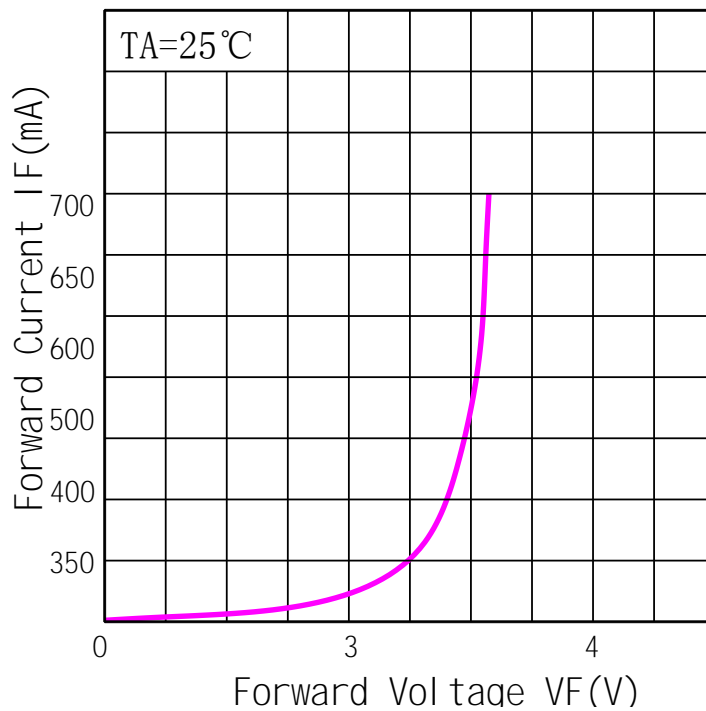
(1) Wavelength Characteristics



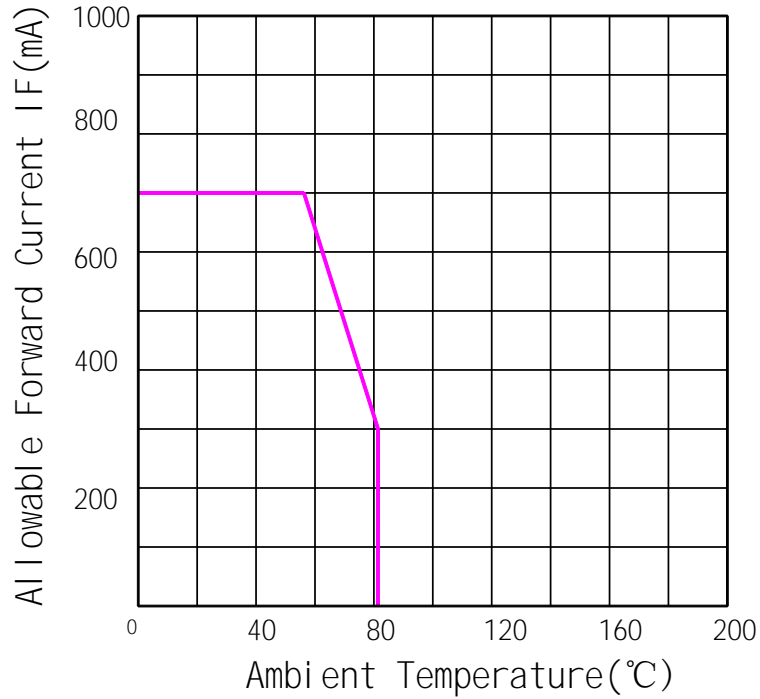
(2) Relative Radiation Flux-IF



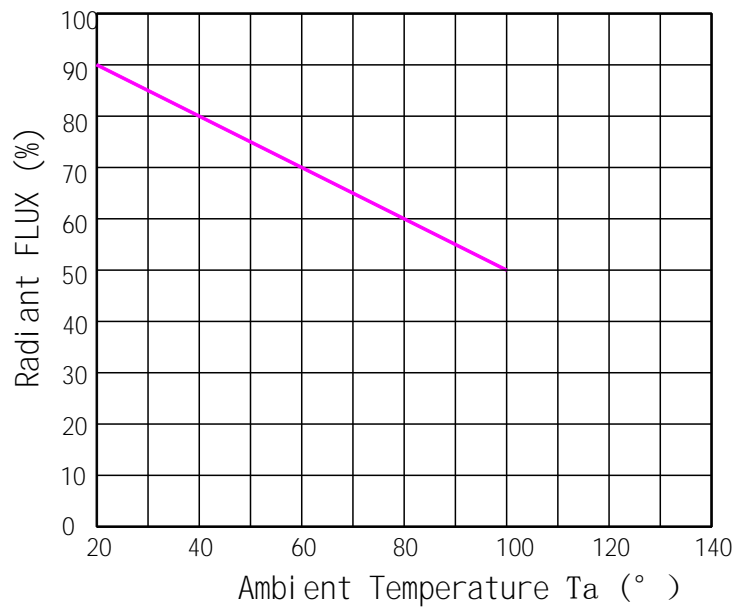
(3) Relative IF-VF



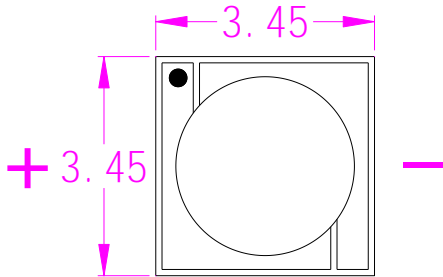
(4) Allowable Forward Current-Ta



(5) Radiation Flux-Ta

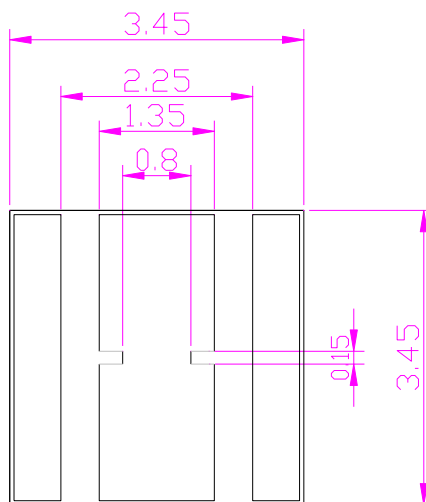


Package Dimensions



Notes :

1. All dimension units are millimeters.
2. All dimension tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.



Label

TYPE: XXXXXXXXXX

QTY: XXXXX

VF: Forward voltage rank

Φ_e : Radiation Flux rank

IF: XXXX

λ_p : Peak Wavelength

DATE: XXXX

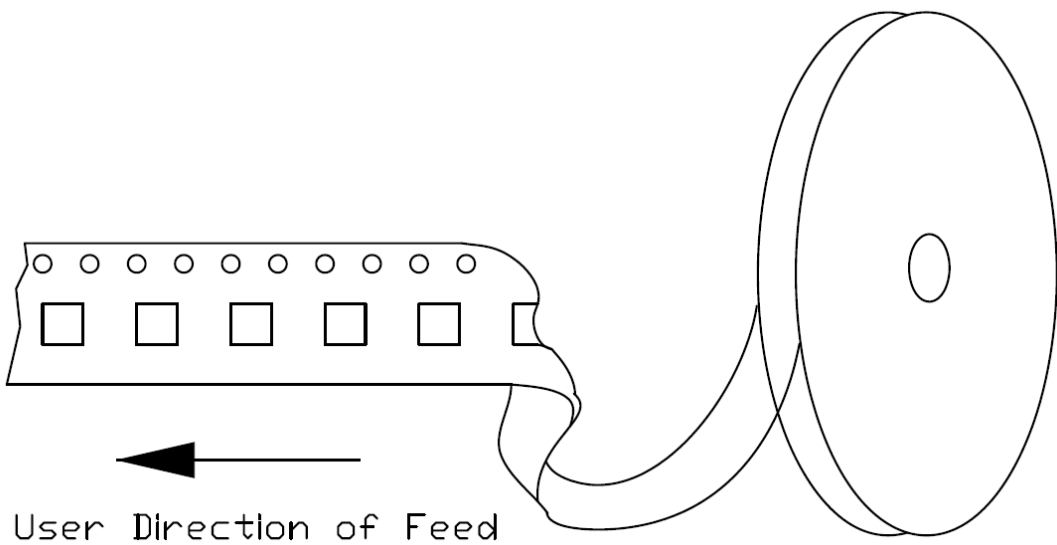
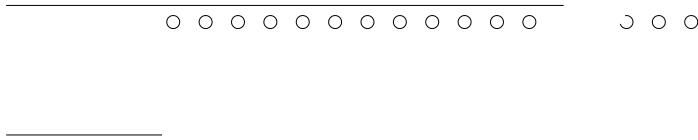
LOT.NO:Lot Number

	HONGLITRONIC 鸿利光电	
TYPE:		QTY:
VF:		Φ_e :
IF:		λ_p :
DATE		LOT. NO:

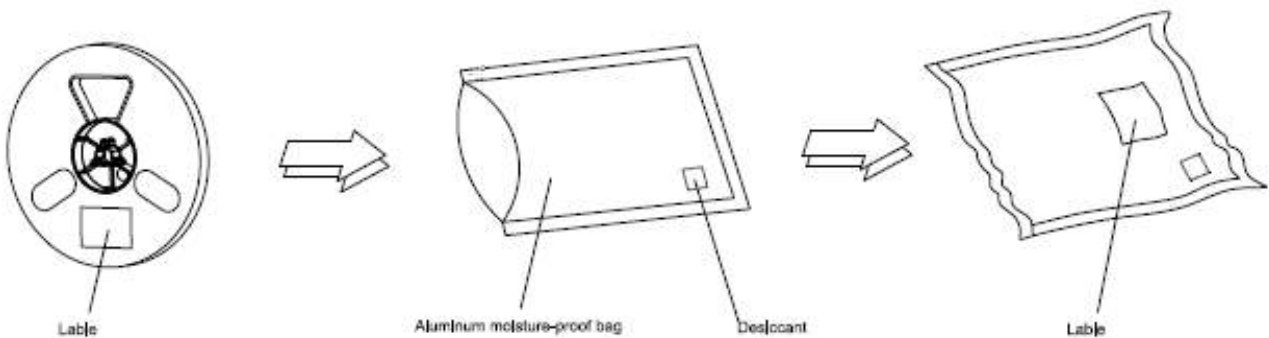
Tape Specifications(Units:mm)

(1)Reel package (1000 pcs/reel

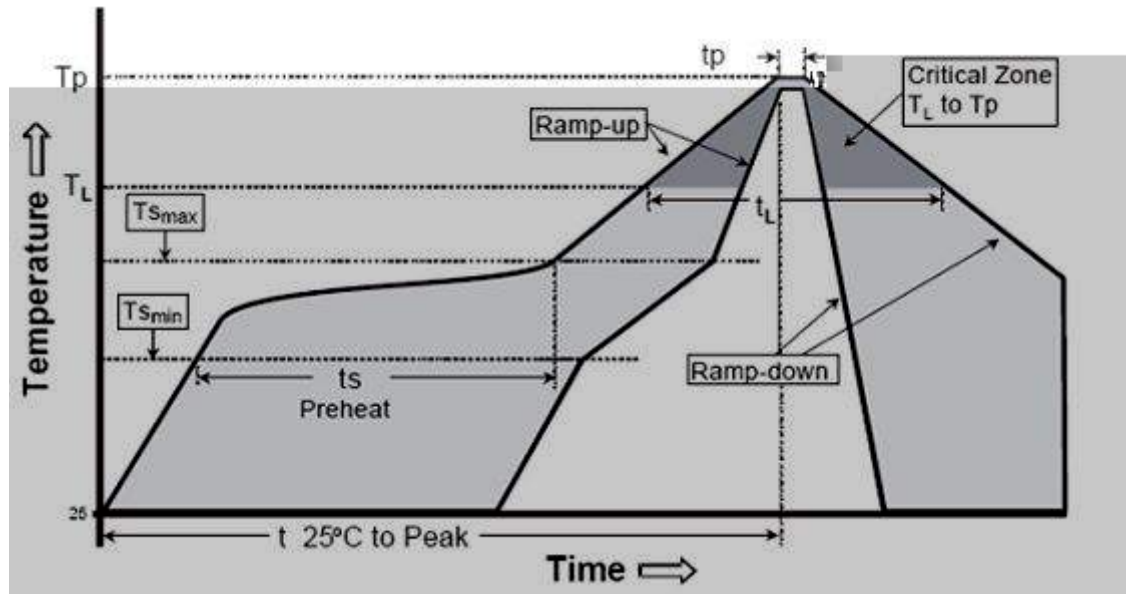
1000 pcs/



(2)Moisture resistant packaging



Reflow soldering instructions



Profile Feature	Lead-Based solder	Lead-Free Solder
Average Ramp-Rate (T_{Smax} to T_p)	3°C/second max	3°C/second max
Preheat: Temperature Min (T_{Smin})	100°C	150°C
Preheat:Temperature Max (T_{Smax})	150°C	200°C
Preheat:Time(t_{Smin} to t_{Smax})	60-120 seconds	60-180 seconds
Time Maintained Above: Temperature(T_L)	183°C	217°C
Time Maintained Above: Time(t_L)	60-150 seconds	60-150 seconds
Peak/Classification Temperature(T_p)	215°C	260°C
Time Within 5°C of Actual Peak Temperature(t_p)	10-15 seconds	20-40 seconds
Ramp-Down Rate	6°C/second max	6°C/second max
Time 25°C to Peak Temperature	6 minutes max	8 minutes max

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°C-220°C.

210°C-220°C

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 °C, the time is not more than 5 seconds.

260

5

使用注意事项

storage)

5-30 °C

60%

LED

24H

60 °C ±5 °C 12H

To avoid moisture, we recommend storage conditions for the unopened LED +5 ~ +30 °C, 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 °C.

1000g

Soldering Conditions This product must be used reflow soldering practices, the maximum temperature of reflow is 260 °C.

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)

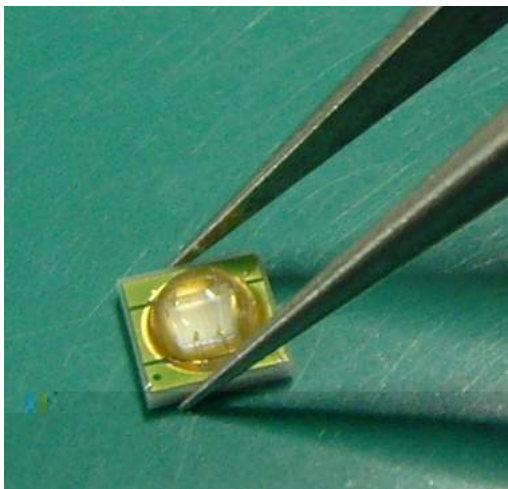
Drive this product at constant current. Output current range specifications should be according to the operational and other conditions, as mentioned in data sheet. Before using a constant voltage source or altered specifications, other than recommended, please consider risk factors.

other)

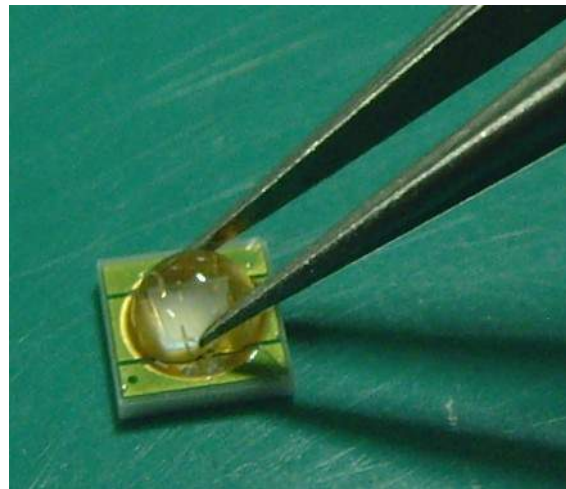
(Cl₂,H₂S NH₃ SO_x NO_x

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, SO_x, NO_x, etc.);
- Exposed to dust, liquids or oils;



OK



NG

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°C,When the temperature exceeds 260 °C, the product failure of LED can be caused

260

260°C

LED