XL-304UBD F3 技术数据表

特点（ ）：

* : F3/3.8*3.0*5.2*28mm
Appearance dimension: F3/3.8*3.0*5.2*28mm
* ŭ ѽ ĭ r : / r
Luminous color and colloid: blue brightness White /blue colloid
* Ğ° ҁ ROHS
Environmental protection products meet ROHS requirements
* MSL :2
Moisture sensitivity level MSL : 2 levels
* EIA ‰´
EIA standard packaging
* ą ش
Long operating life
* Ω⁻
High energy efficiency, fast startup
* ٧ ۱ ⁻
Low voltage DC drive

应用领域（ ）：

* Ḥ;
Home appliances, digital, communication
*
Automotive Electronics
*
Lighting decoration
* ĭ
electronic toy
*
electronic clock
* ´
Traffic instructions
* Ч ת ל
Medical beauty instruments
*
Electronic teaching equipment
* ⁄ ˙ .
Urban lighting

电性参数

ǎ

w Consumed power	Pd	70	mW
h Max Continuous Forward Current	IF	20	mA
h Ⅱ Peak Forward Current	IFp	80	mA
ƀ Operating ambient temperature	Topr	-20 C ~ +85 C	
Ũ Storage ambient temperature	Tstg	-40 C ~ +85 C	
Ð Welding conditions	Tsol	reflow soldering 240°C 6s manual welding 300°C 3s r ضي2.0mm ץ	

ѽ ǎ

ǎ	ˆ	ע	ע	ע	٧ β	Ð
Ũ ѽ Luminous Intensity	Iv	300	600	900	mcd	IF=20mA
Dominant Wave Length	λ d	460	/	470	nm	IF=20mA
Ṿ Peak Wave Length	λ p	/	465	/	nm	IF=20mA
h ٧ Forward Voltage	VF	2.8	3.0	3.4	V	IF=20mA
Ũ ѽ Viewing Angle	2Ø1/2	/	30	/	deg	IF=20mA
Spectral Width at half height	λ	/	25	/	nm	IF=20mA
Ĩ h Reverse Current	IR	/	/	≤10	μA	VR=5V

ѽ Ẓ ±10% ٧Ẓ ±0.1V (X,Y)شم Ẓ ±0.01 ٧ ѽ Ẓ ±1nm

Note: the light intensity error is 10%; The pressure drop error is ±0.1V ; (X,Y) coordinate deviation ±0.01 wavelength error ±1 nm.

亮度分档

：

代码	最小值	最大值	单位	测试条件
A4	300	400	mcd	IF=20mA
A5	400	500		
A6	500	700		
A7	700	900		

电压分档

：

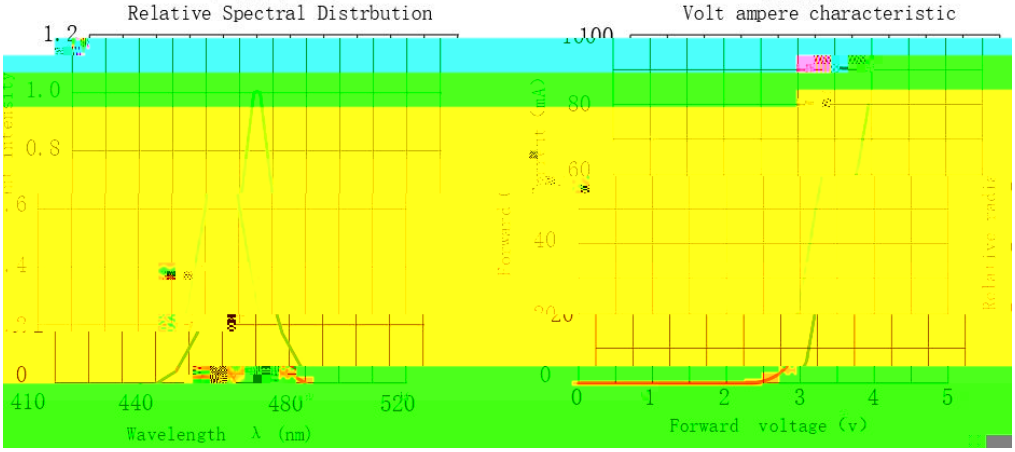
代码	最小值	最大值	单位	测试条件
N13-3	2.8	3.0	V	IF=20mA
N13-4	3.0	3.2		
N13-5	3.2	3.4		

波长分档

代码	最小值	最大值	单位	测试条件
HB04	460	465	nm	IF=20mA
HB05	465	470		
HB06	470	475		

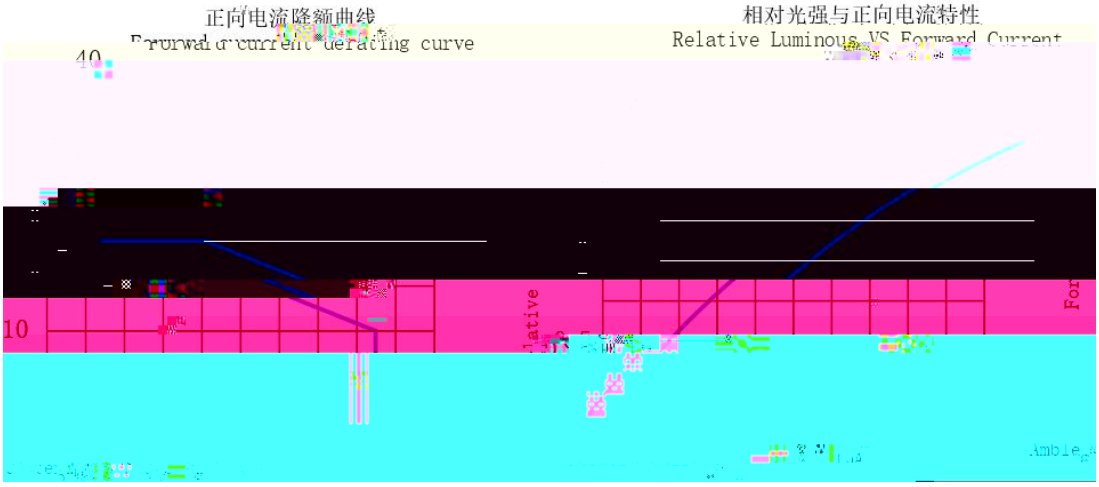
典型特性曲线

光谱分布曲线
Relative Spectral Distrbution



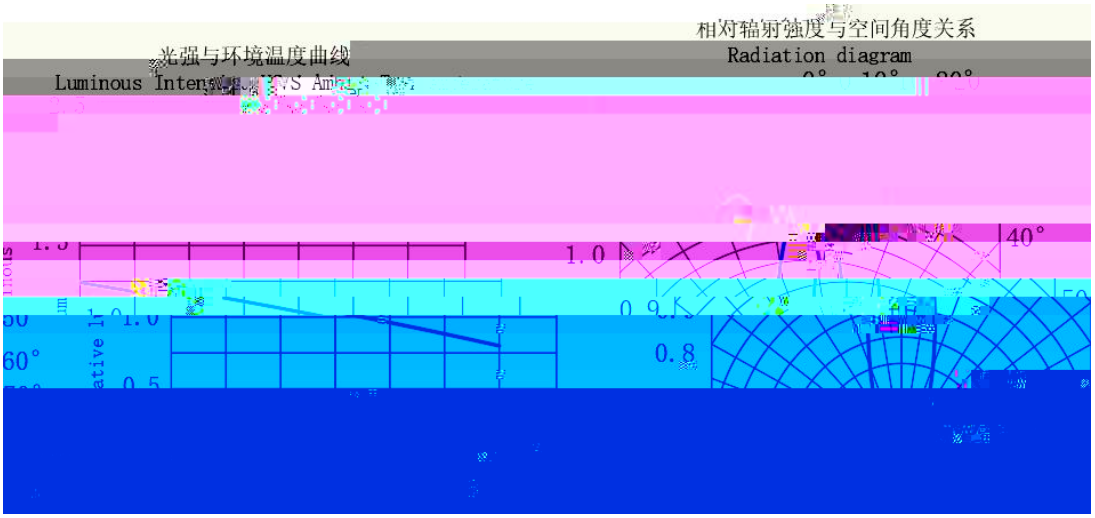
伏安特性
Volt ampere characteristic

正向电流降额曲线
Forward current derating curve



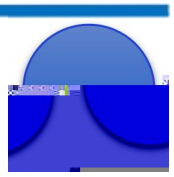
相对光强与正向电流特性
Relative Luminous VS Forward Current

光强与环境温度曲线
Luminous Intensity VS Ambient Temperature

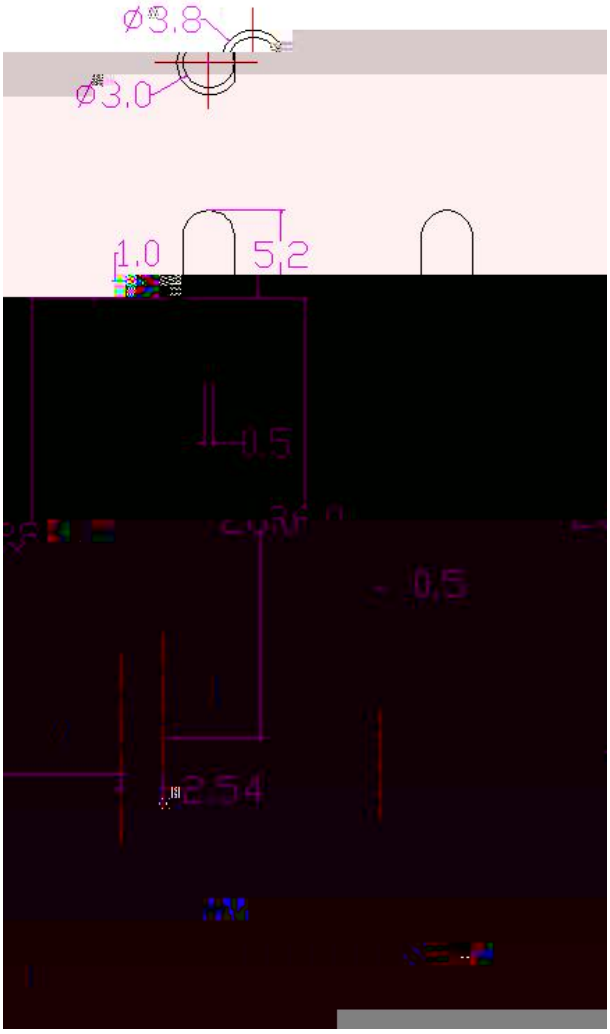


相对辐射强度与空间角度关系
Radiation diagram

25±5 /Note If not otherwise indicated the test environment temp erature is 25±5



外形尺寸



(Note)

1. 丫 β

Dimensions are in millimeters.

2. ≠ ¨Ḥ ˋE ± 0.50㎜ .

Tolerances unless mentioned are ± 0.50mm.

包装

*
In Bags

*
Moisture Proof and Anti-Electrostatic Foil Bag

使用注意事项（1）

1.

LED ą ɢ ᵖ W`E Ḥ LED ضي

This LED can be used in some ordinary electronic equipment, such as office equipment, communication equipment, house decoration, if LED is used in some high reliability requirements, such as air transportation, traffic control and medical liao equipment, must refer to the information provided by sales.

LED 30 70% LEDضي ą

Storage environment of LED with temperature not exceeding 30 and relative humidity not exceeding 70%.It is recommended that LDE be used in the original box for no more than three months. If longer storage time is required, put it in the drying box and add desiccant or filled with nitrogen.

ضي 3№

Special care must be taken when cleaning collo jde with chemicals, as some chemicals have damage to the collo jde surface and cause fading such as trichloroethylene, propylene, ketone, etc.It can be wiped and soaked with ethanol for no more than 3 minutes at room temperature.

1 2

It must be 2 mm from the collo j eIJ bend the bracket.

2 2

Support forming must be jmde with fixtures or by a professional.

3 ضي

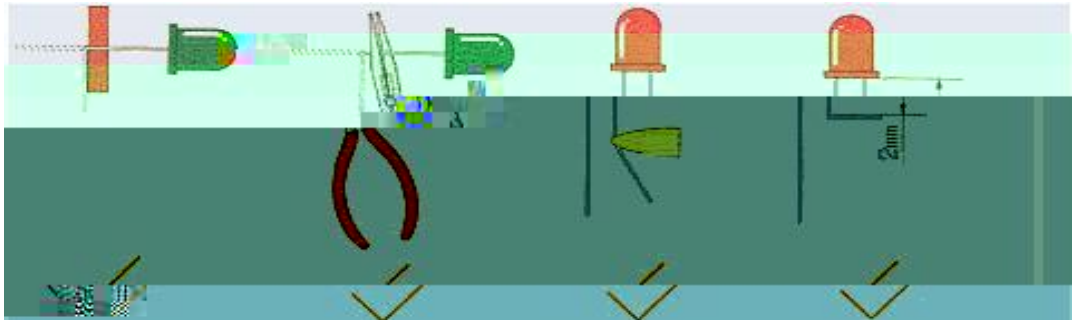
Support forming must be completeĎefore welding.k

4 Ḡ ġ

The pins and spacing are the same as on the circuit board.

5 ضي LED PCB U ضيLED

Welding must be performeĎ normal temperature and when LED is normally welded to the PCB plate, avo j epplying mechanical pressure at LED pins at a minimum.



使用注意事项（2）

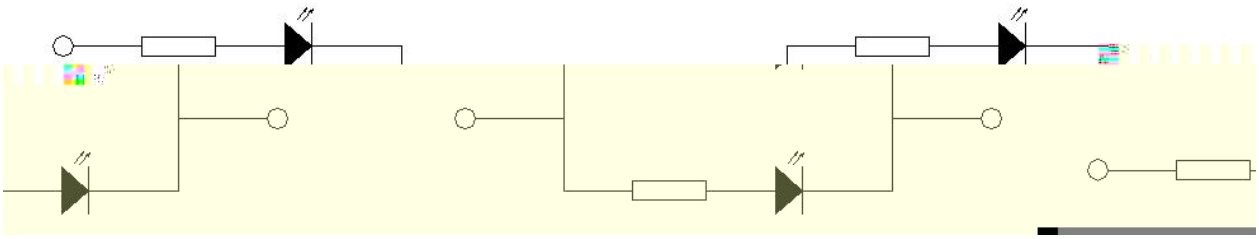
Precautions (2)

ضي r 2mm ץ ضي ڑ ڜ LED r ضي ↕ U
ڜ ضي ٧ ڑ ـ LED r

When welding, welding must be conducted below 2mm of colloid bottom. When welding, try to avoid soaking LED colloid. After welding, avoid adding external force on the pin or shaking LED colloid.

ـ
LED ╠ ـ LED A ضي LED ٧ ץ Ḡ LED

In the current driving mode of LED, if LED is multiple in parallel, it is recommended to use line A and add a flow limit resistance to each LED to ensure the consistent brightness of LED.



غ ▲ ٦ Ψ LED InGaN ↓ ج ą ą غ
ą r HBM<1000V ك <100V

High increase of static electricity and current will damage LED. Use antistatic devices such as protective belts and gloves. Note: human discharge mode HBM <1000V; machine discharge mode <100V.