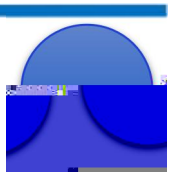
XINGLIGHT®

Part No.: [redacted]

2016 白光 1W 贴片式发光二极管



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XINGLIGHT®

Part No. : [redacted]

电性参数

Electrical Characteristics

Absolute Maximum Ratings Ta=25

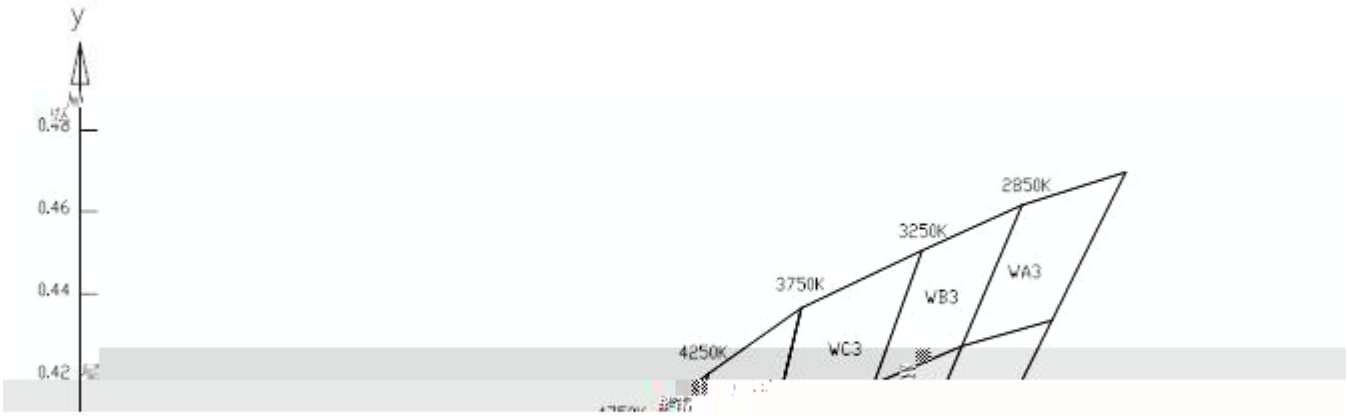
Parameter	Symbol	Value	Unit
Max Power Dissipation	PD	1000	mW
Max Continuous Forward Current	IF	350	mA
Peak Forward Current	IFP	500	mA
Max Reverse Voltage	VR	5	V
Antistatic ability	ESD	2000	V
Operating Temperature Range	TOPR	-40 ~ +85 C	
Storage Temperature Range	TSTR	-40 ~ +85 C	
/ Lead Soldering Temperature/Time	TSOL	260 ≤6S	/

Initial Electrical Optical Characteristics Ta=25

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Luminous Intensity	Φ	90	100	130	LM	IF=350mA
Color temperature	TC	6000		6500	K	IF=350mA
Coordinate value	X					IF=350mA
	Y					IF=350mA
Forward Voltage	VF	2.8		3.4	V	IF=350mA
Color rendering index	Ra		70			IF=350mA
Viewing Angle	2θ1/2		120		Deg	IF=350mA
Reverse Current	IR			1	μA	VR=5V

亮度分档:
Brightness grading:

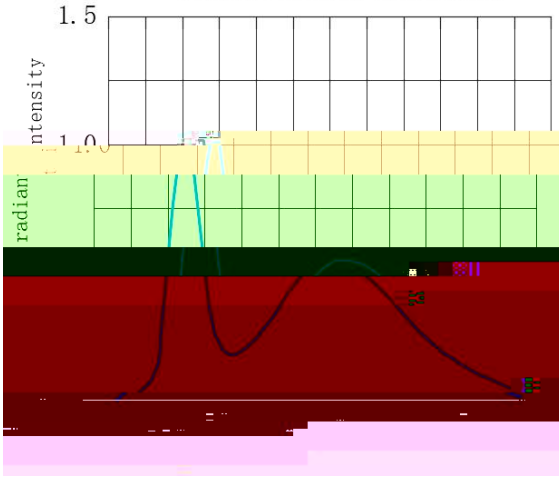
CIE 1931 xy CHROMATICETY DIAGRAM



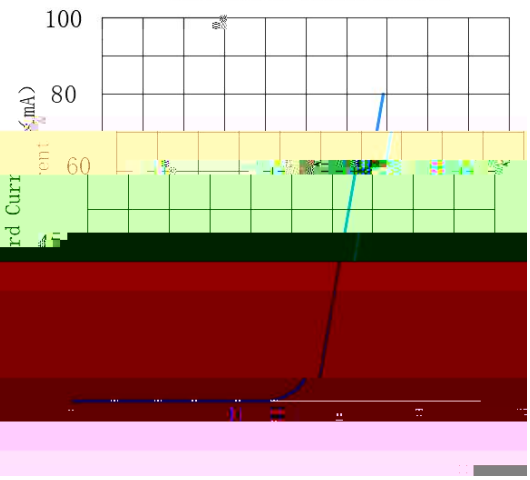
典型特性曲线

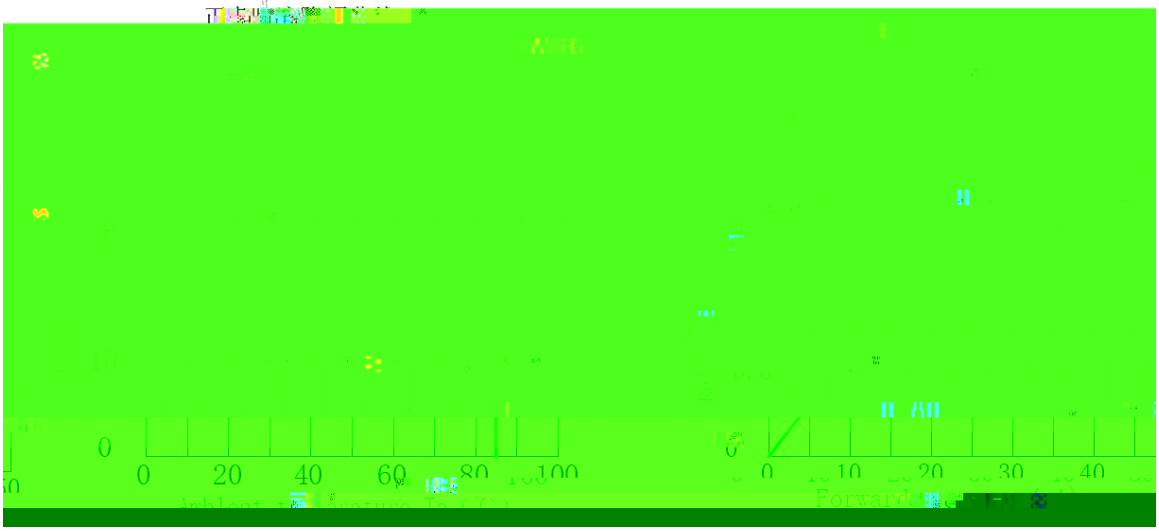
Typical Characteristics Curves

光谱分布曲线
Relative Spectral Distrbution

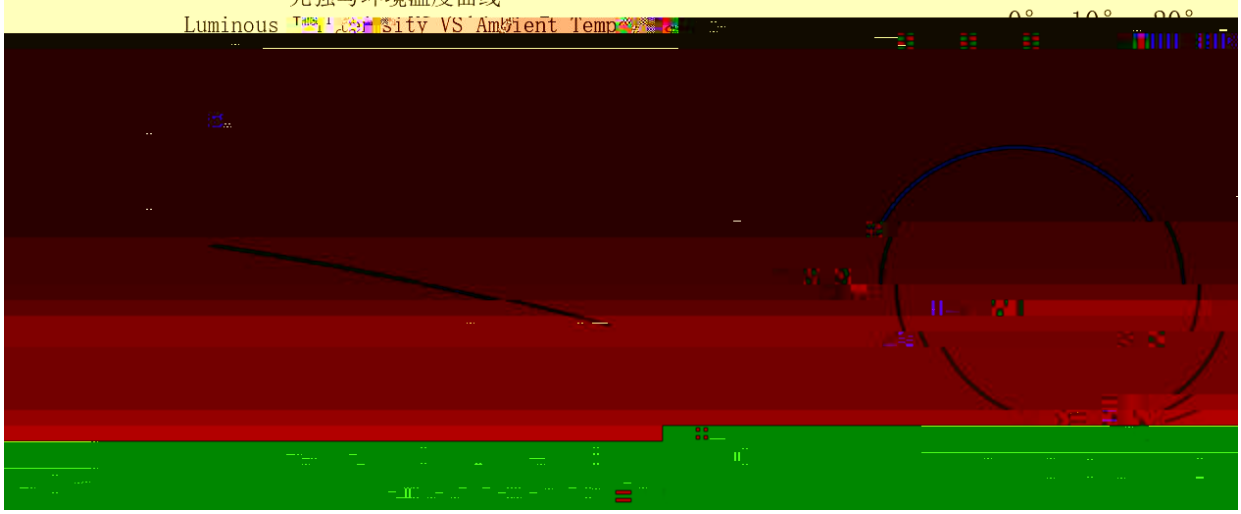


伏安特性
Volt ampere characteristic





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



相对辐射强度与空[illegible]关系
Radiation diagram

25Ñ5 /Note If not otherwise indicated the test environment temp erature is 25Ñ5

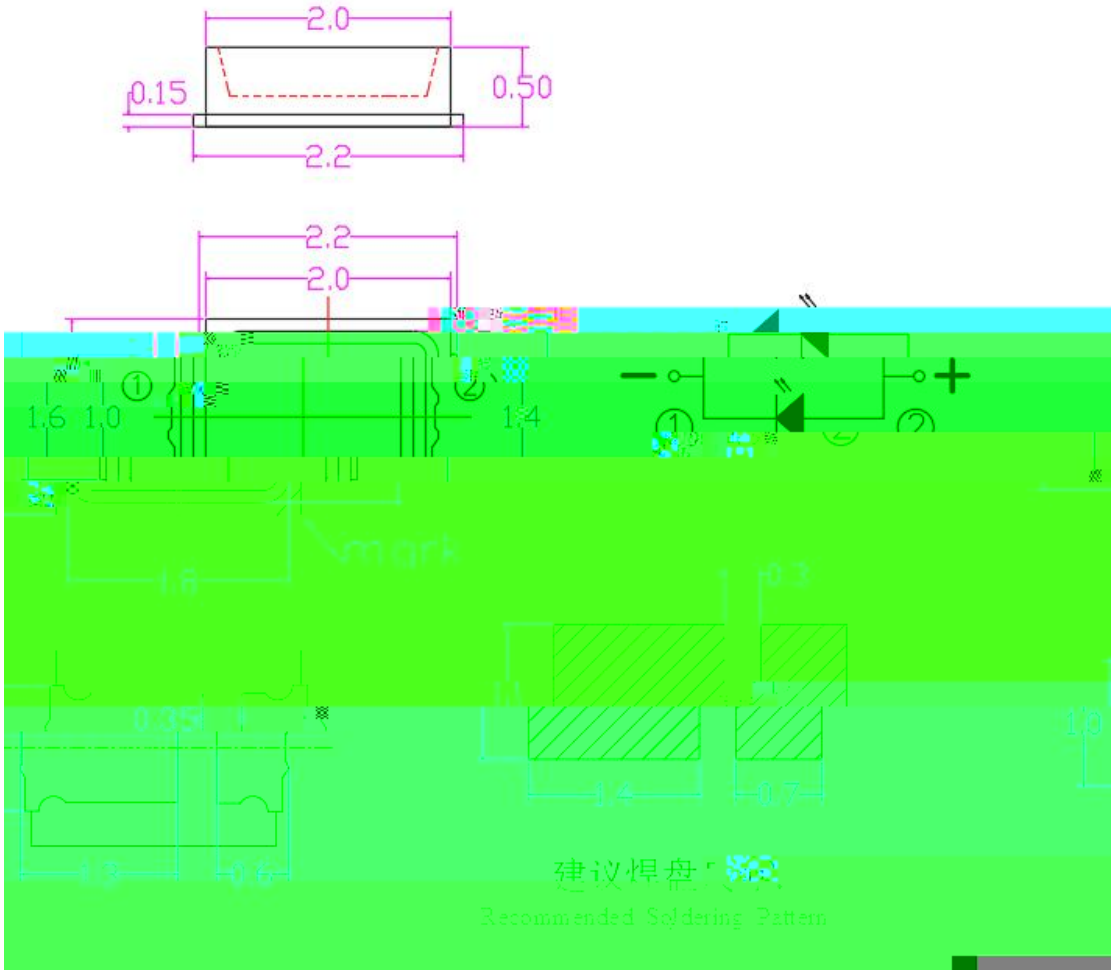
Test project	Test conditions	Number of tests	Reference standard	Failure criteria	LED PCS LED S PC
Moisture proof grade	1. =260 ,10 2 1 Maximum temperature of reflow soldering =260 , 10 seconds, 2 reflow soldering; 2. 30 =70% 168H Storage conditions before reflow soldering: 30 , relative humidity =70%, 168h;	/	JEITA ED-4701 300.301	**1**	0/22
Welding reliability (lead free reflow soldering)	=245Ñ5 5 Maximum temperature of reflow soldering =245 Ñ 5 , 5 seconds (lead-free reflow soldering)	/	JEITA ED-4701 303 303A	**2**	0/22
thermal cycling	~~-40 30 ~25 5 ~~ 100 30				

[redacted]

Part No.: [redacted]

[redacted]

Outline Dimension



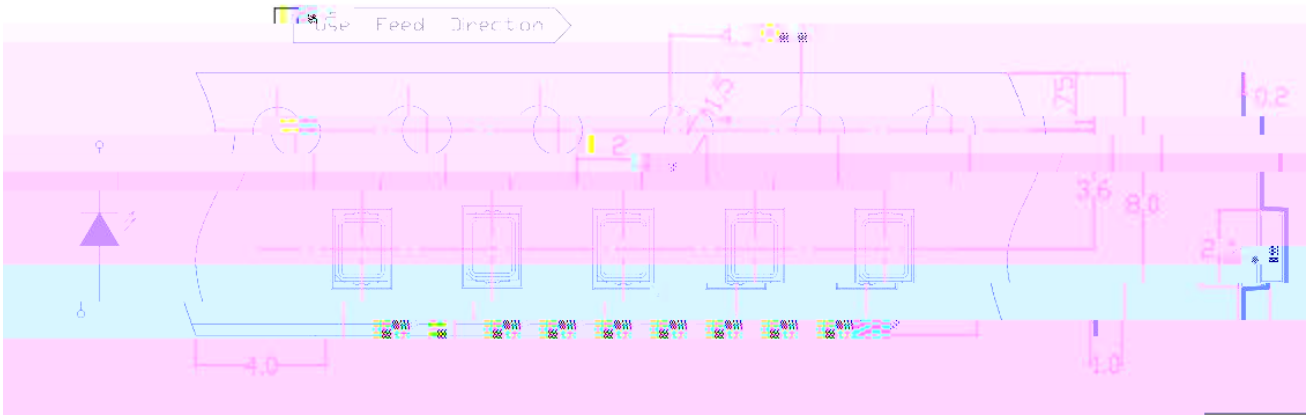
Remarks:
1. mm
All dimensions are in millimeters.

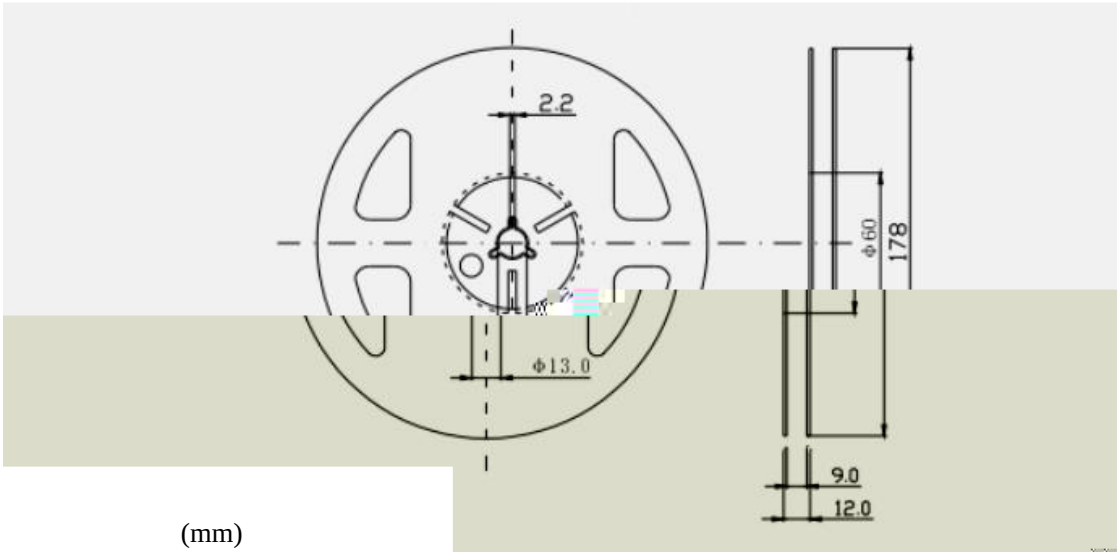
2. ±0.25mm
Tolerance is ±0.25mm unless otherwise noted

包装（1）

Packaging (1)

载带与圆盘尺寸 Belt and disk dimensions





:

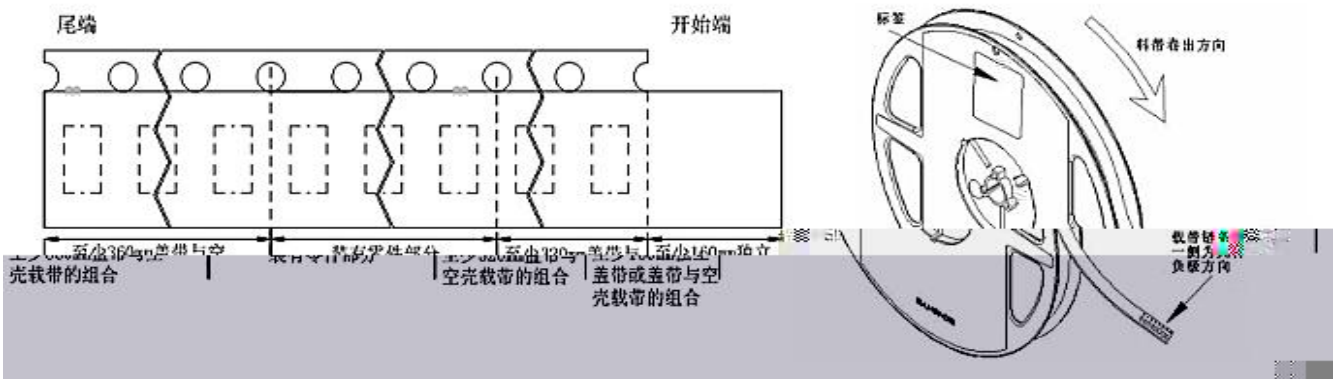
1. (mm)

1. Size unit is mm (mm).

2. Ñ0.1mm

2. The dimensional tolerance is Ñ 0.1mm.

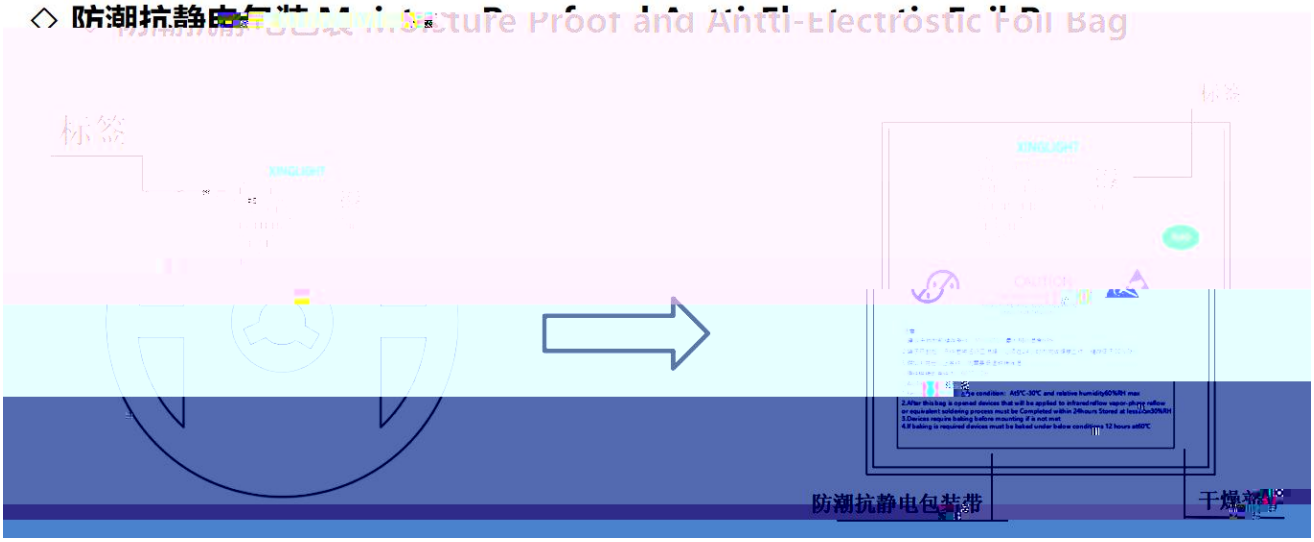
圆盘及载带卷出方向及空穴规格 Disk and carrier belt direction of roll and hole dimensions



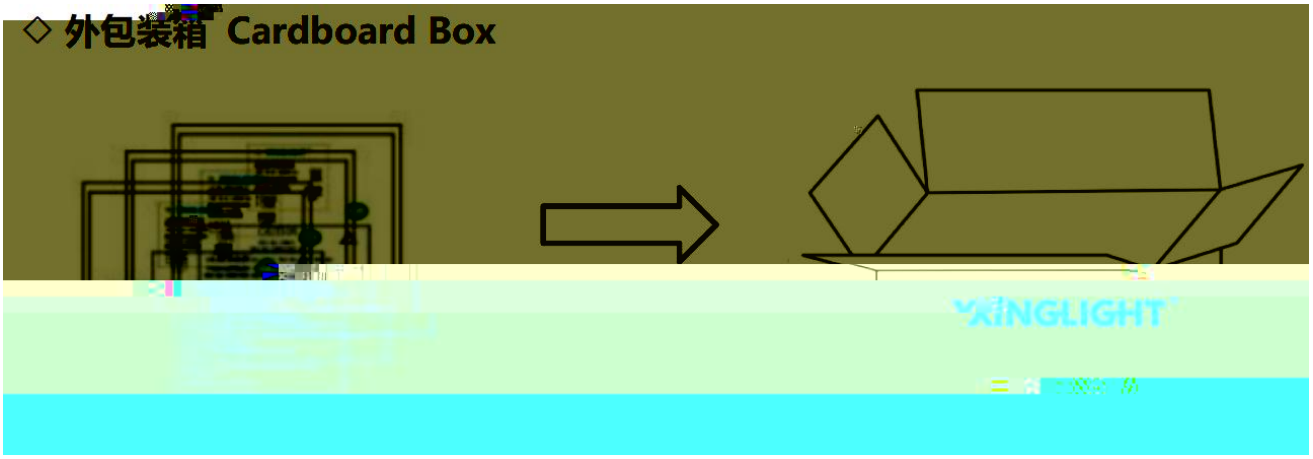
包装（2）

Packaging (2)

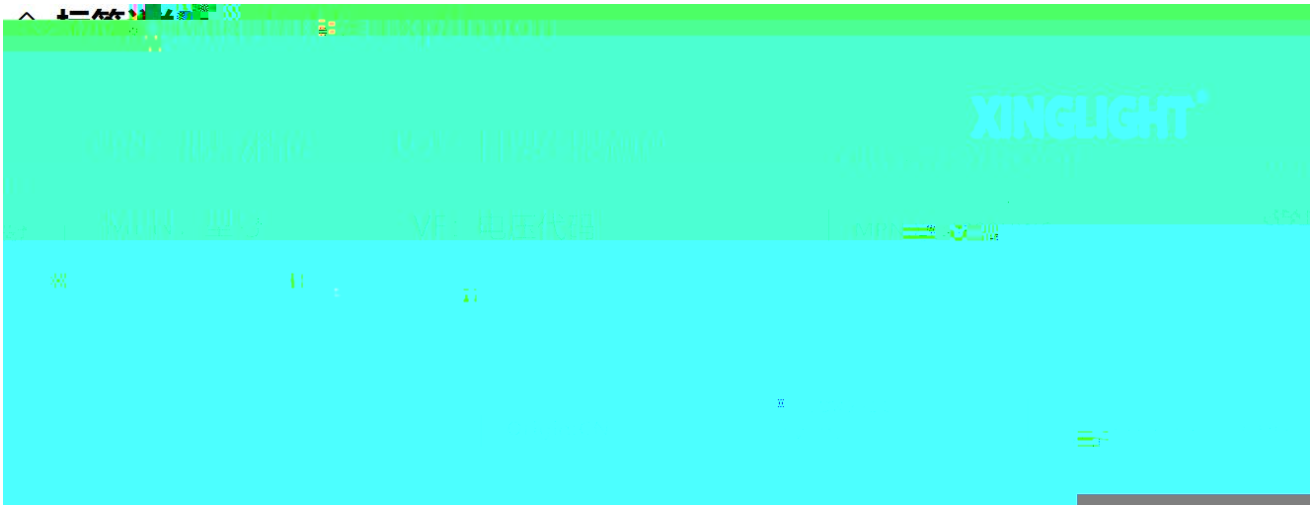
◇ 防潮抗静电包装 Moisture Proof and Antti-Electrostic Foil Bag



◇ 外包装箱 Cardboard Box



◇ 标签说明 Label Description



[redacted]1）

Guideline for Soldering (1)

1. [redacted]

Hand Soldering

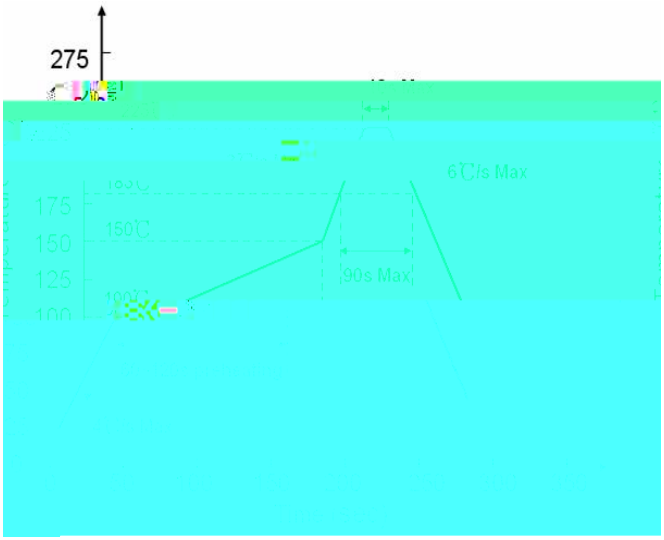
20W 300

3 LED

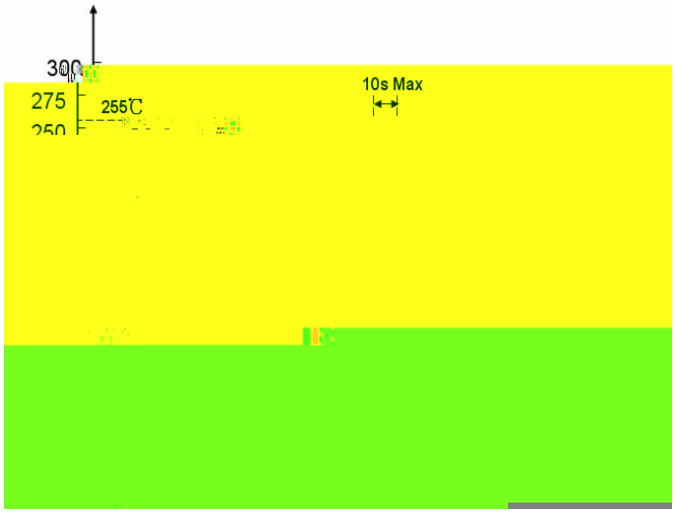
A soldering iron of less than 20W is recommended to be used in Hand Soldering. Please keep the temperature of the soldering iron under 300 while soldering. Each terminal of the LED is to go for less than 3 second and for one time only.Be careful because the damage of the product is often started at the time of the hand soldering.

2. [redacted]

Reflow Soldering: Use the conditions shown in the under Figure ofPb-Free Reflow Soldering.



Lead process



lead free

Reflow soldering should not be done more than two times.

LED

Stress on the LEDs should be avoided during heating in soldering process.

After soldering, do not deal with the product before its temperature drop down to room temperature.

240 ± 5 /6S

The recommended maximum welding temperature for the product is 240 ± 5 /6s

焊接指导（2）

Guideline for Soldering (2)

清洗

Clea

30 3 50 30

LED

300W LED

LED

It is recommended that alcohol be used as a solvent for cleaning after soldering. Cleaning is to go u 30 for 3 minutes or 50 for 30 seconds. When using other solvents, it should be confirmed beforehand whether the solvents will dissolve the package and the resin or not.

Ultrasonic cleaning is also an effective way for cleaning. But the influence of Ultrasonic cleaning on LED depends on factors such as ultrasonic power. Generally, the ultrasonic power should not be higher than 300W. Before cleaning, a pretest should be done to confirm whether any damage to LEDs will occur.

* **注意：** PCB

PCB

* **Note:** This general guideline may not apply to all PCB designs and configurations

3、

Design Consideration

* LED

A LED B

LED V_F LED

* In designing a circuit, the current through each LED must not exceed the absolute maximum rating specified for each LED. In the meanwhile, resistors for protection should be applied, otherwise slight voltage shift will cause big current change, burn out may happen.

It is recommended to use Circuit A which regulates the current flowing through each hen

Part No.: [redacted]