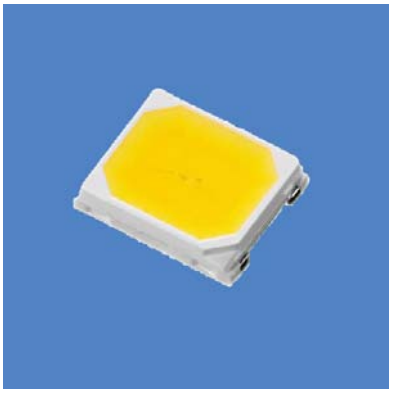
2835 SMD LED

Applications

- Signal & Symbol Indicators.
- Illuminated advertising
- Amusement Machines.
- LCD Backlighting.
- Indoor & Outdoor Displays.
- Automobile Interior Lighting.
- Tubular light application
- General lighting



Edition: V1.0
Date: May 2016

PART NO	Chip		Lens Color
	Material	Emitted Color	
LED-2835WVC	InGaN	White □	WATER CLEAR

Absolute Maximum Ratings (Ta = 25℃)

Items	Symbol	Absolute maximum Rating	Unit
Power Dissipation	PD	400	mW
Forward Current(DC)	IF	120	mA
Peak Forward Current *	IFP	200	mA
Reverse Voltage	VR	5	V
Operation Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +100	℃
Soldering Temperature	Tsol	Reflow Soldering:240℃/10sec Hand Soldering: 300℃/3sec	

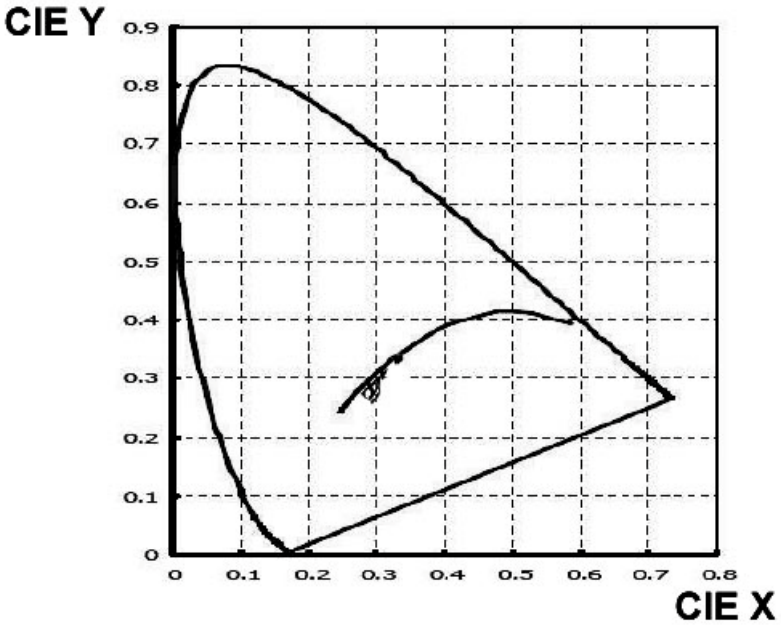
*Pulse width≦0.1msec duty≦1/10

Typical Electrical & Optical Characteristics (Ta = 25℃)

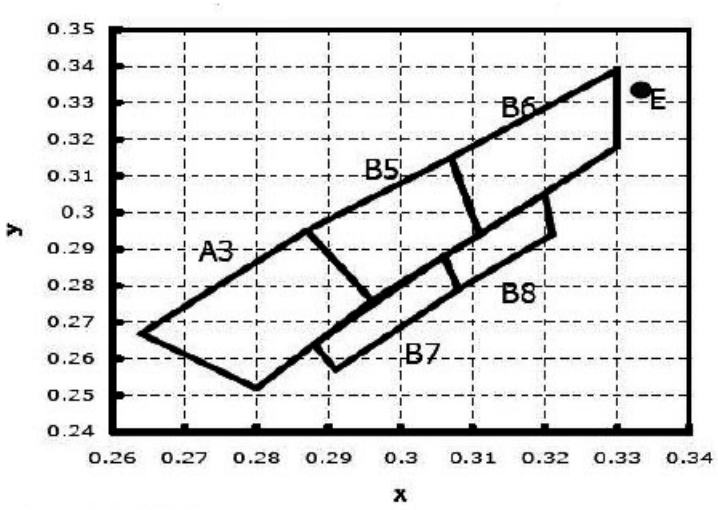
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF = 60mA	2.6		3.2	V
Reverse Current	IR	VR = 5V			10	μA
Chromatic Coordinates	(X,Y)	IF =60mA			(0.30,0.30)	nm
Luminous Intensity	IV	IF = 60mA		30		LM
50% Power Angle	2θ½	IF = 60mA		120		Deg
Color Rendering Index	Ra	IF = 60mA	80			
Thermal Resistance （Junction / Soldering point）	Rthj-s	IF = 60mA		8.5		℃/W

Note: 1. 2θ½ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. The above luminous flux measurement allowance tolerance is ±10%.
3. The above Color Rendering Index measurement allowance tolerance is ±2
4. The above forward voltage measurement allowance tolerance is ±0.1V.

CIE Chromaticity Chart



Color Coordinate



Color Ranks

Rank A3				
x	0.280	0.264	0.287	0.296
y	0.252	0.267	0.295	0.276

Rank B5				
x	0.296	0.287	0.307	0.311
y	0.276	0.295	0.315	0.294

Rank B7				
x	0.291	0.288	0.306	0.308
y	0.257	0.264	0.288	0.279

Rank B6				
x	0.311	0.307	0.330	0.330
y	0.294	0.315	0.339	0.318

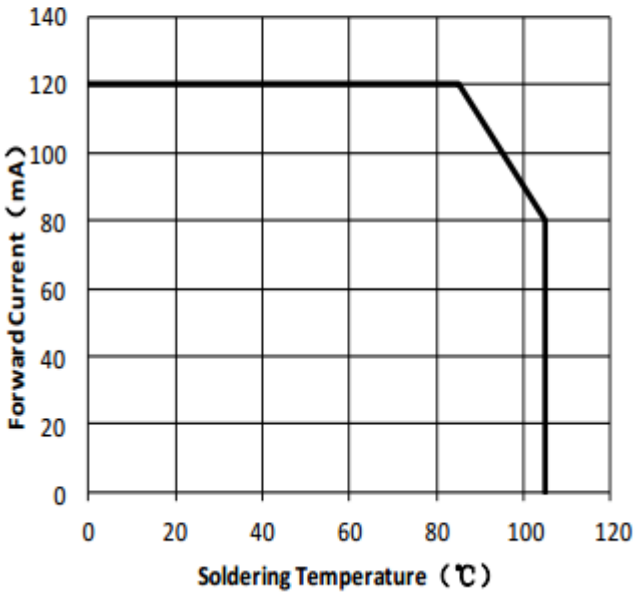
Rank B8				
x	0.308	0.288	0.32	0.321
y	0.279	0.264	0.305	0.294

* Color coordinates measurement allowance is ±0.01

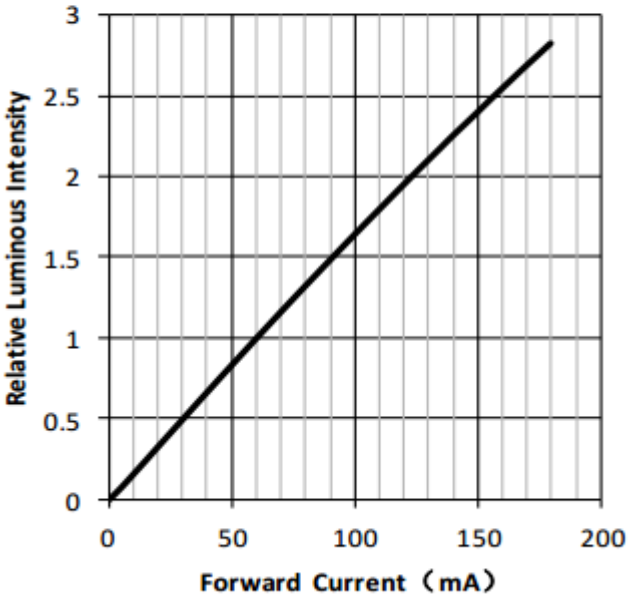
Typical Electrical/Optical Characteristics Curves (Ta=25° Unless Otherwise Noted)

Soldering Temperature vs. Forward Current
焊盘温度与正向电流特性曲线

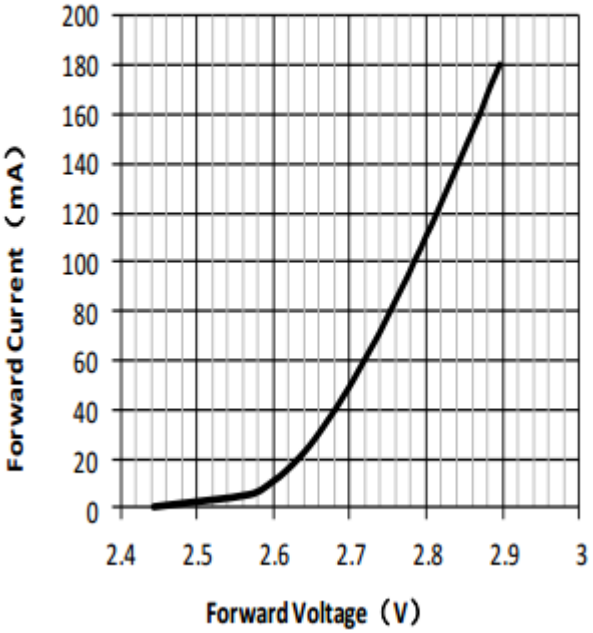
Junction Temperture＜115℃



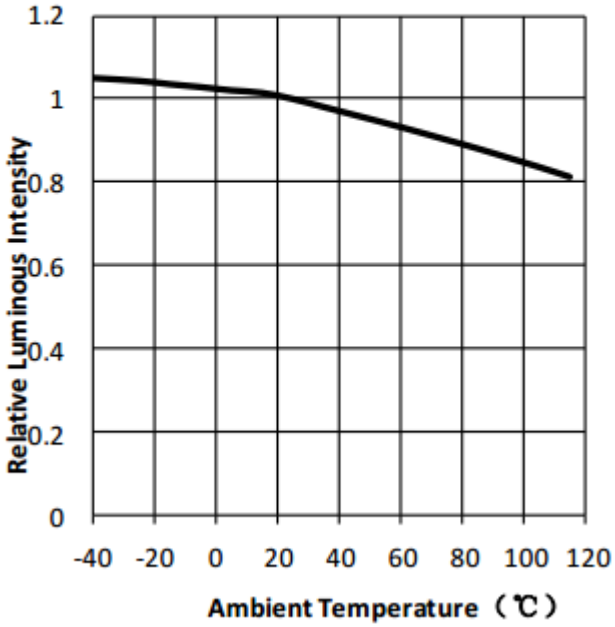
Forward Current VS. Relative Intensity
正向电流与相对光强特性曲线



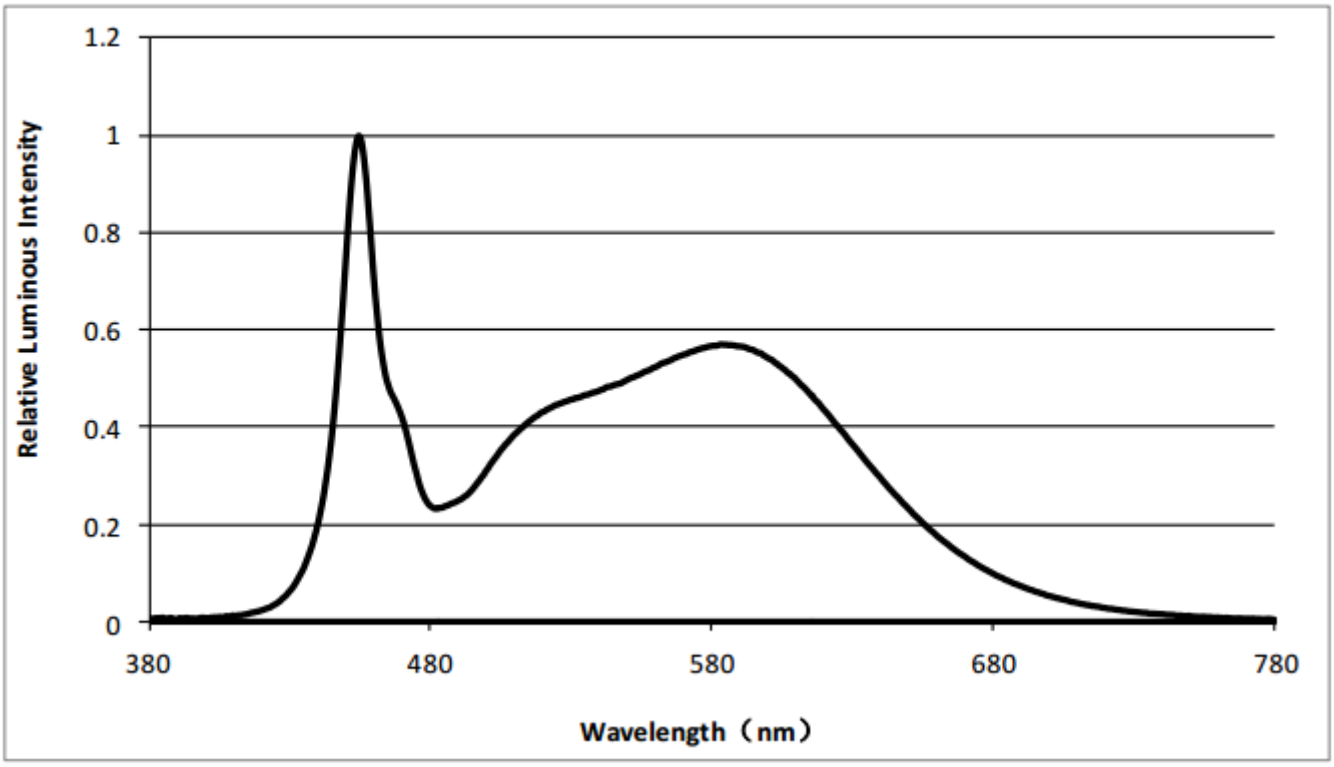
Forward Voltage VS. Forward Current
正向电压与正向电流特性曲线



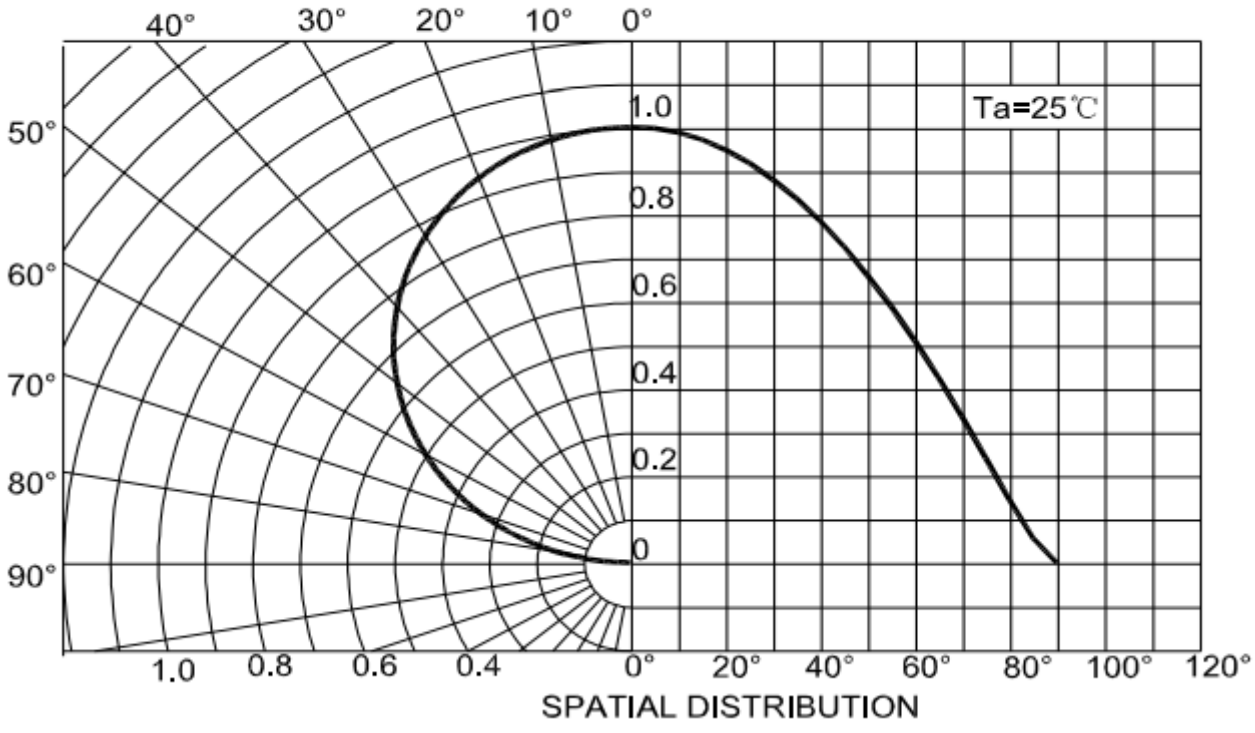
Ambient Temperature VS. Relative Intensity
环境温度与相对光强特性曲线



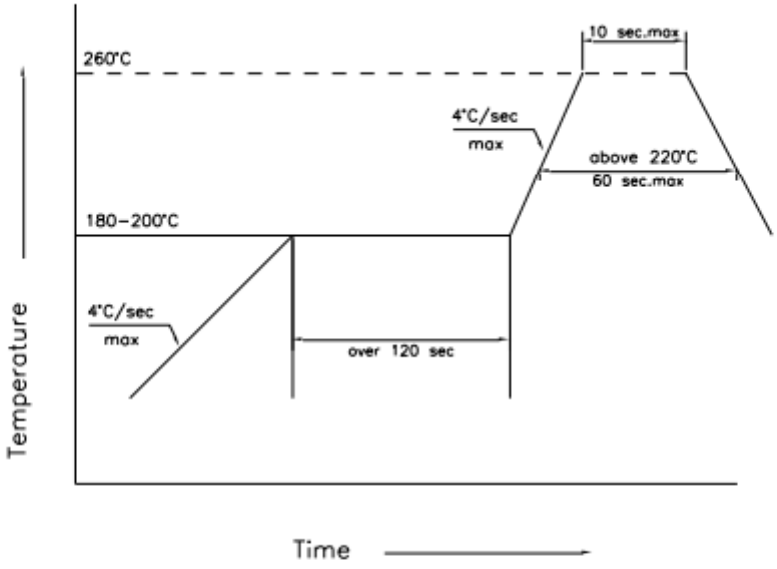
Relative spectral emission 相对光谱分布特性曲线



Radiation diagram 辐射图特性曲线



SMT Reflow Soldering Instructions SMT回流焊说明



1.Reflow soldering should not be done more than two times. 回流焊不可以做两次以上

2.When soldering , do not put stress on the LEDs during heating

当焊接时，不要在材料受热时用力压胶体表面

Soldering iron 烙铁焊接

1.When hand soldering, keep the temperature of iron below less 300℃ less than 3 seconds

当手工焊接时，烙铁的温度必须小于300℃，时间不可超过3秒

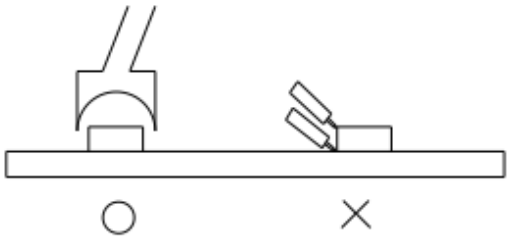
2.The hand solder should be done only one times

手工焊接只可焊接一次

Repairing 修补

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed in advance whether the characteristics of LEDs will or will not be damaged by repairing.

LED回流焊后不应该修复，当修复是不可避免时，必须使用双头烙铁（如下图），但必须事先确认此种方式会或不会损坏LED本身的特性。

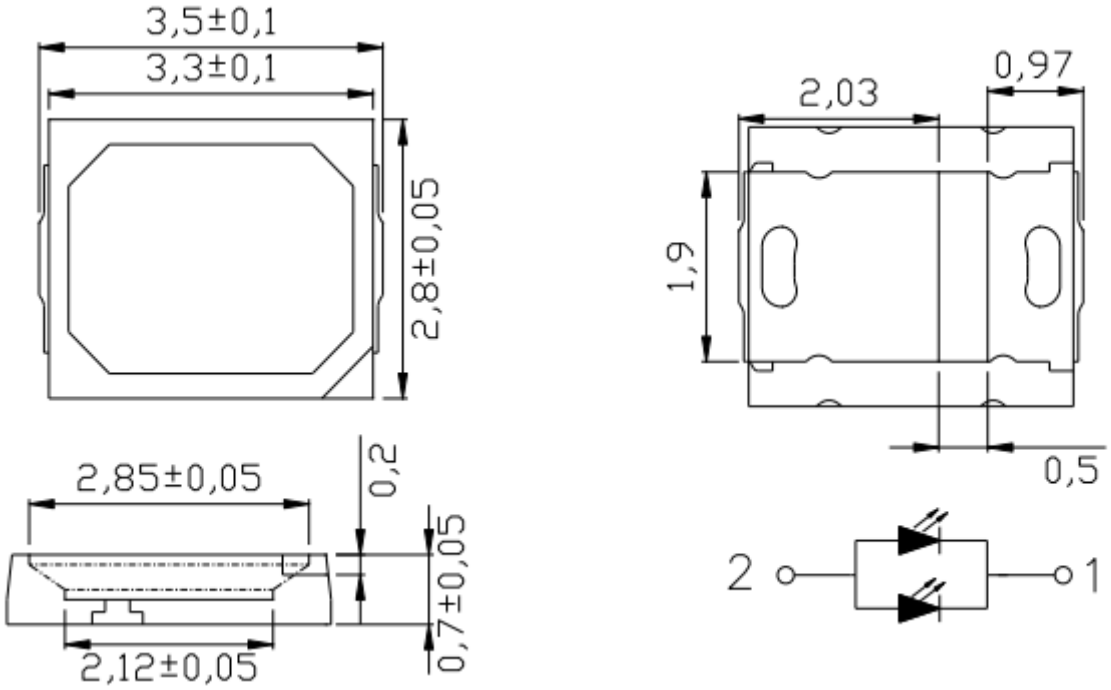


Cautions 注意事项

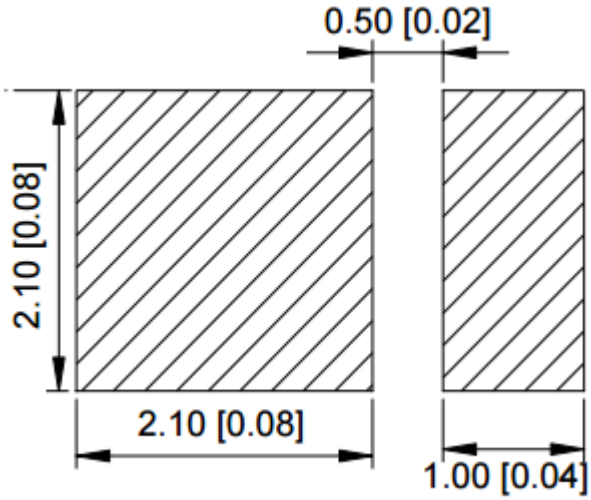
The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper.

LED封装为硅胶，故LED胶体表面较软，用力按压胶体表面会影响LED可靠性，因此应有预防措施避免在封装的零件上的强大压力，当使用吸嘴时，胶体表面的压力应是恰当的。

Package Dimensions (unit:mm)



Recommended Soldering Pattern



Notes:

All dimensions in mm tolerance is ±0.1mm unless otherwise noted.

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