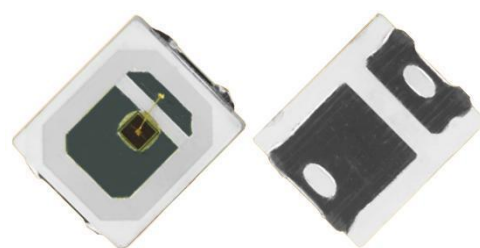




产 品 规 格 书

PRODUCT SPECIFICATION



产品型号 (Product Model) : HS-2835-UR-2V

产品描述 (Product Description) : 2835 红光 0.2 瓦 2 伏

产品制造商：深圳市鸿之森电子有限公司			
市场部	核准	编制	时间
杨锐	姚洪标	钟友青	2018-10-10

产品应用商：		
核准	确认	时间



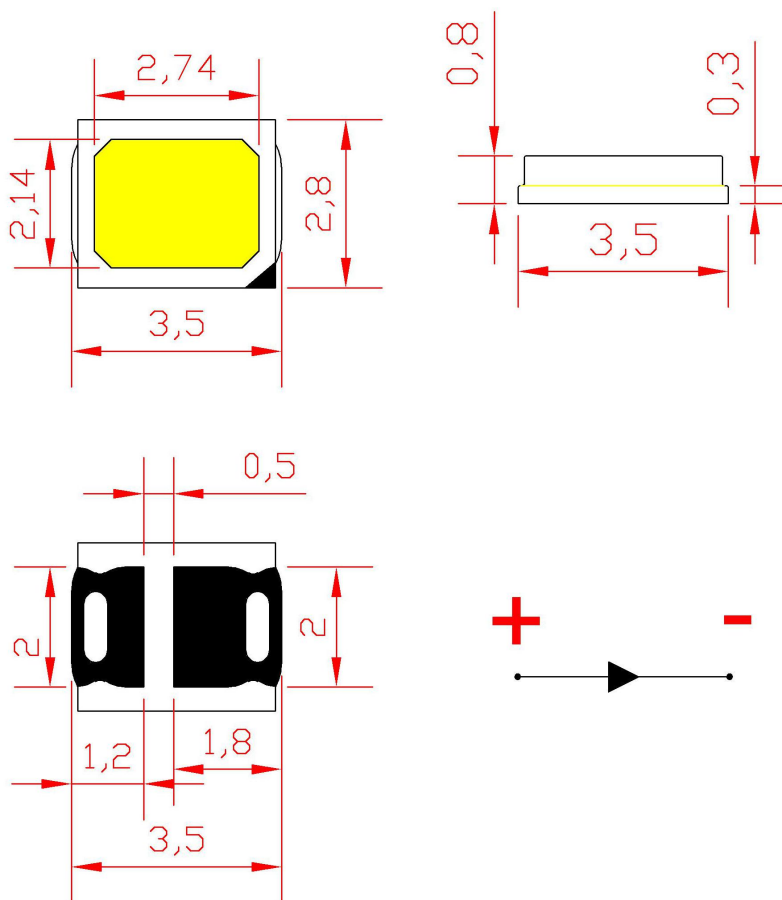
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产品特性 (Features)

- 长寿命 (Long operating life)
- 低维护成本 (Reduced maintenance costs)
- 高效能 (More energy efficient)
- 低电压直流驱动 (Low voltage DC operated)
- 启动快 (Instant light)
- 符合RoHS标准 (RoHS compliant)

外形尺寸 (Outline Dimension)



说明: ①所有标注尺寸单位为毫米 (All dimensions are millimeters) ;

②公差为 0.05 毫米 (Tolerance is 0.05 mm) 。



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■ 最大绝对额定值 (Absolute maximum ratings) Ta=25℃

参数 Parameter	符号 Symbol	典型值 Typical	单 Unit
功率耗损 Power dissipation	Pd	80	mW
正向电流 Forward current	If	40	mA
反向电压 Reverse voltage	Vr	5	V
工作温度范围 Operating temperature range	Top	-40 ~+85	℃
贮存温度范围 Storage temperature range	Tstg	-40~+100	℃
最大脉冲电流 Peak pulsing current	Ifp	60	mA
抗静电能力 Electrostatic Discharge	ESD	2000(HBM)	V
焊接温度 Soldering temperature	Tsol	230~240, ≤10s	℃

备注：脉冲持续时间 ≤ 10msec，占空比 ≤ 1/10
IFP Conditions: Pulse Width ≤ 10msec. and Duty cycle ≤ 1/10.

■ 电器光学特性 (Electrical & Optical Characteristics) Ta=25℃

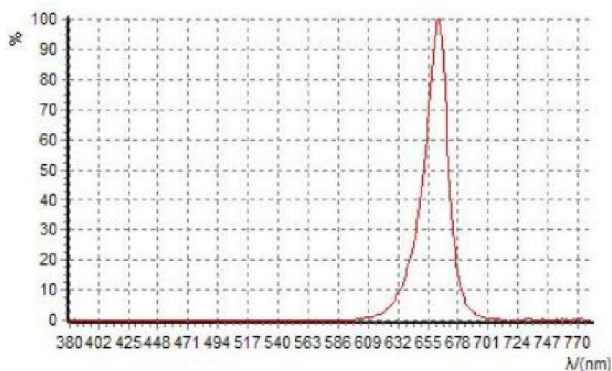
项目 Item	测试条件 Test Condition	符号 Symbol	最小值 Min.	典型值 Typ.	最大值 Max.	单位 Unit
正向电压 Forward voltage	If=60mA	Vf	1.8	--	2.2	V
光通量 Luminous intensity	If=60mA	Iv	300	--	500	mcd
			500	--	700	
主波长 Main wavelength	If=60mA	λ d	620	--	630	nm
反向电流 Reverse current	Vr=5V	Ir	--	--	5	μA



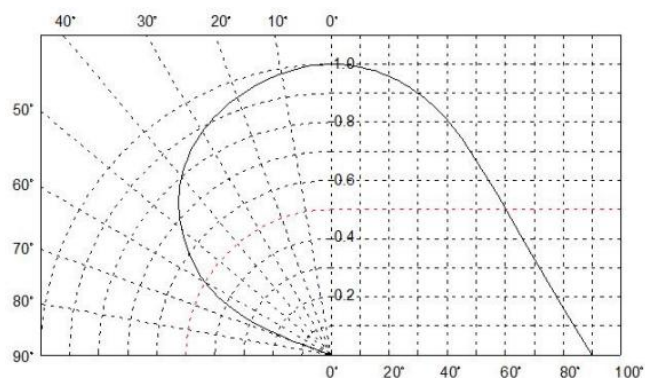
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典型光电特性曲线 (Typical optical characteristics curves)

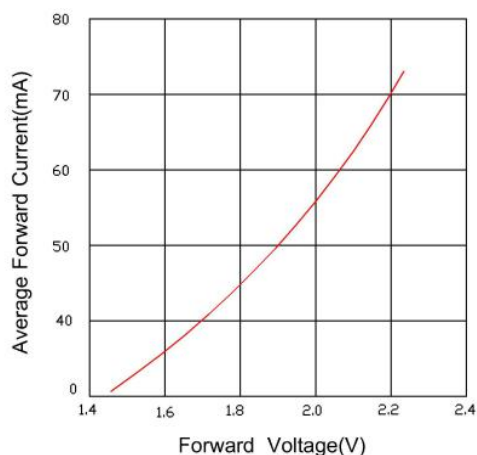
◆ 发射光谱 (Emission spectrum)



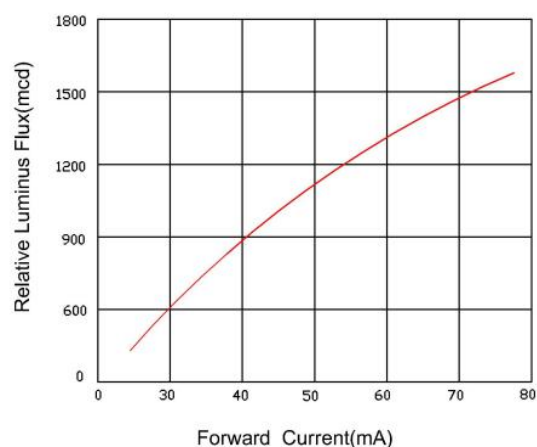
◆ 典型辐射分布图 (Typical radiation distribution map)



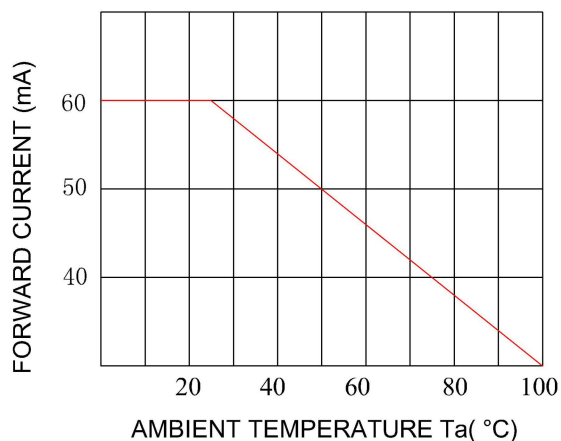
◆ 福安特性 (V-A characteristic)



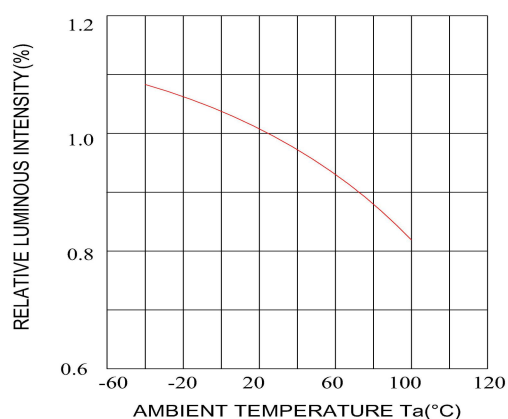
◆ 亮度特性 (Luminance characteristic)



◆ 温度与电流关系
(Temperature and current characteristic)



◆ 温度与亮度关系
(Temperature and brightness characteristic)





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■ 可靠性试验 (Reliability test)

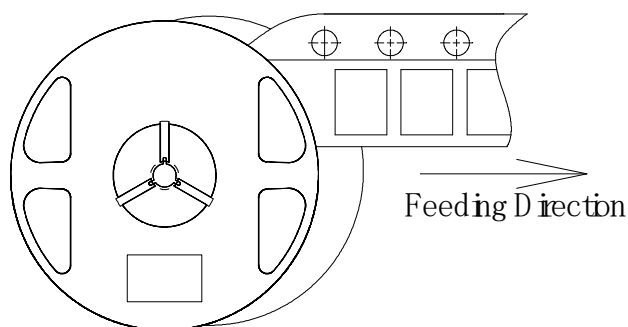
测试项目 Test project	测试条件 Test conditions	测试周期 Test cycle	样品数量 Sample quantity	允收 Ac/Re
常温老化 Normal temperature aging	Ta=25℃ IF=40mA	1000H	22pcs	0/1
高温老化 High temperature aging	Ta=85℃ IF=40mA	500H	22pcs	0/1
高温存储 High temperature storage	Ta=100℃	1000H	22pcs	0/1
低温存储 Cryogenic storage	Ta=-40℃	1000H	22pcs	0/1
冷热冲击 Thermal Shock	-40℃/30min~ 100℃/30min	100 cycles	22pcs	0/1
回流焊 Reflow test	Ta=260℃ T=10s	3 times	22pcs	0/1
高温高湿老化 High temperature and high humidity aging	85℃/85%RH IF=40mA	500H	22pcs	0/1
硫化实验 Vulcanization experiment	Ta=85℃	2H	10pcs	0/1
红墨水实验 Red ink experiment	Ta=85℃	2H	22pcs	0/1
静电测试 Antistatic test	2000V HBM	1 times/pcs	10pcs	0/1



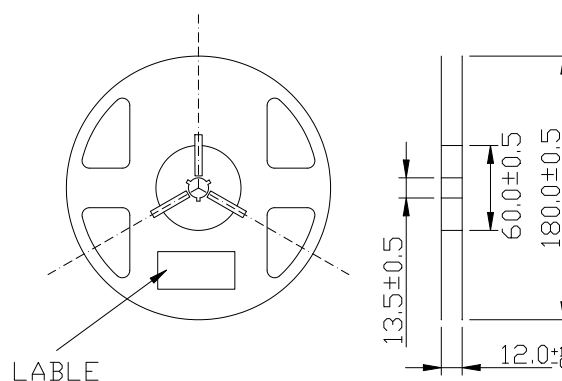
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卷盘包装规格 (Reel packaging specification)

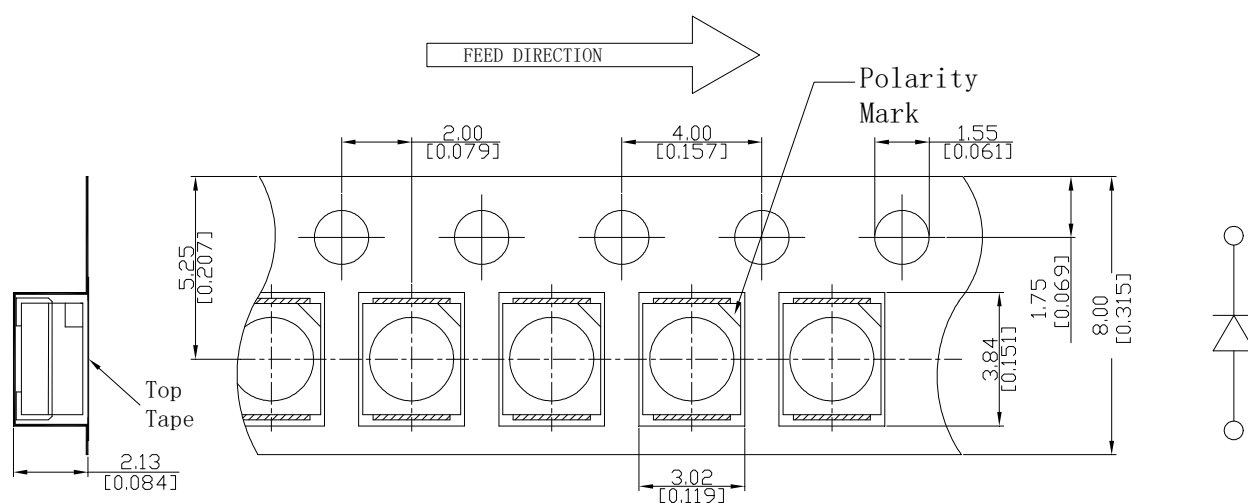
◆ 卷带输送方 (Feeding Direction)



◆ 卷盘尺寸 (Dimensions of Reel)



◆ 卷带尺寸 (Dimensions of Tape)



备注 (NOTES):

- 1、无材料部分同样用上封带密封;

No material part is also sealed with sealing tape.

- 2、材料缺口 (负极) 方向, 与卷带齿孔方向一致;

The direction of material gap (negative pole) is the same as that of the coiling hole.

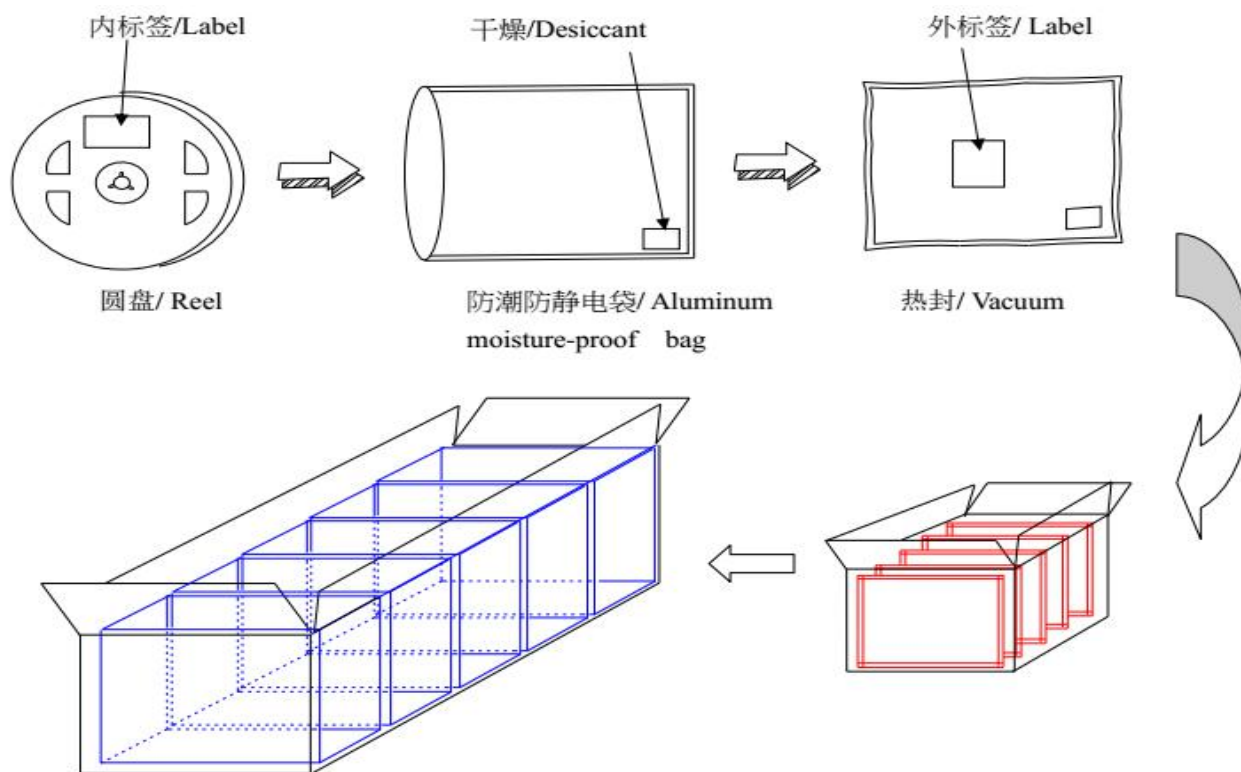
- 3、4000pcs/卷

4000 pcs/ Reel.



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■ 纸箱包装规格 (Carton packaging specification)

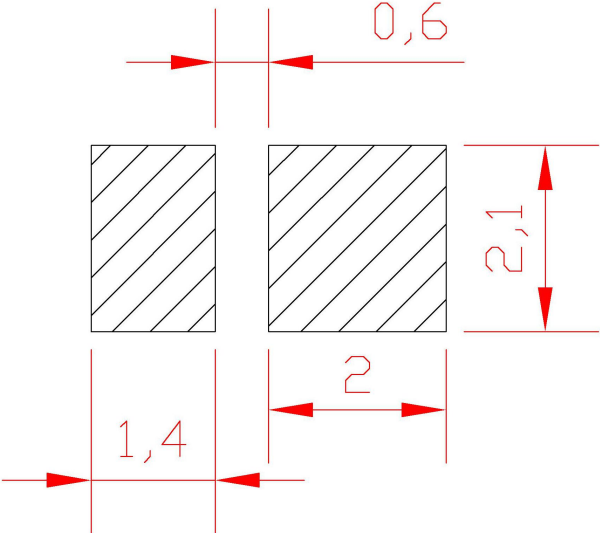
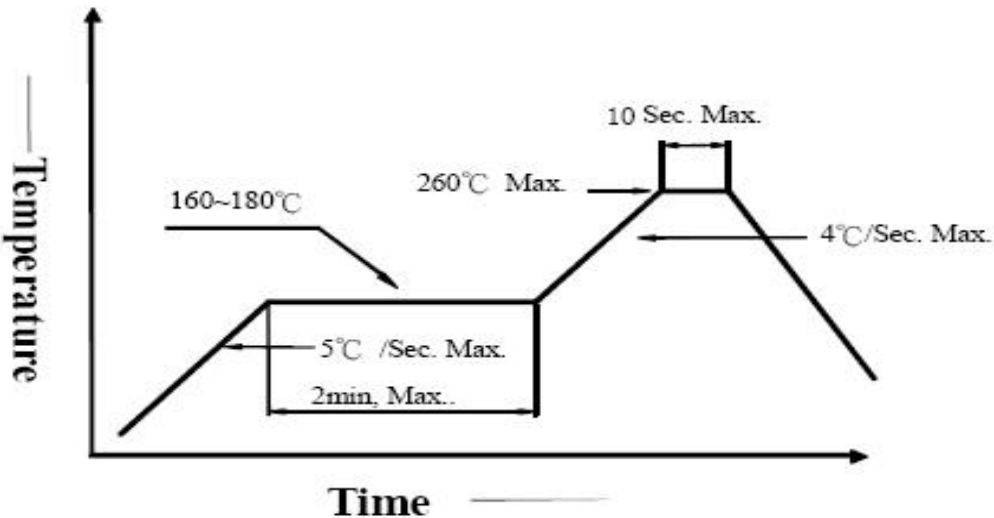


■ 标签 (Label)



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■ 使用重要事项 (Importation for user)

建议焊盘尺寸 (Recommended pad size)	
无铅回流焊规范 (Specification for lead free reflow soldering)	

说明 (Note) :

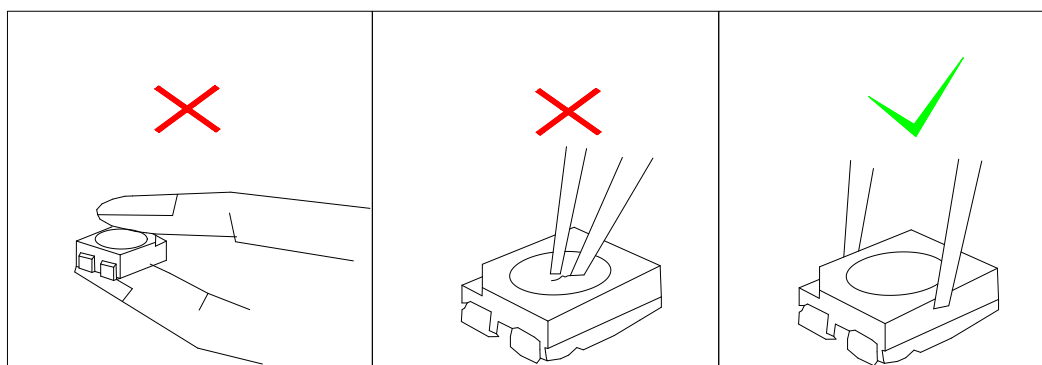
- 1、焊接时请不要重压 LED 灯 (Do not press LED lamp when welding) ;
- 2、焊接后温度未回降到常温时请勿扭曲线路板 (Do not distort the circuit board when the temperature does not return to normal temperature after welding) ;
- 3、手工焊接时, 烙铁温度不高于 300℃, 每个焊脚焊接时间不超过 3 秒
(The temperature of the iron should be lower than 300℃ and soldering within 3sec per solder-pad is to be observed) ;



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4、必须注意的是把这些灯放到装置中使用时，不可接触 LED 灯的胶体表面，以避免其受到破坏导致死灯或减少光效率。

(Caution must be used in handing this device to avoid damage to the lens surfaces that will reduce optical efficiency)。



■ 存储重要事项 (Important storage items)

1、请在未准备使用 LED 之前不要打开防静电袋子

(Do not open the moisture proof bag before ready to use the LEDs) ;

2、LED 在未开封之前应保存在 30℃ 以下，湿度在 60% 以下的环境中，最长保存期为 1 年

(The LEDs should be kept at 30℃ or less and 60%RH or less before opening the package. The max. storage period before opening the package is 1 year) ;

3、打开包装待后，LED 需保存在 30℃/40% 湿度以下的条件，且必须在 4H 内使用完

(After opening the package, the LEDs should be kept at 30℃/40%RH or less, and it should be used within 4 hours) ;

4、如果 LED 超出了第 3 点要求，则 LED 必须经过烘烤才能使用。

烘烤条件为：60±5℃，12 个小时

(If the LEDs be kept over the condition of 3, baking is required before mounting.

Baking condition as below: 60±5℃ for 12 hours) 。