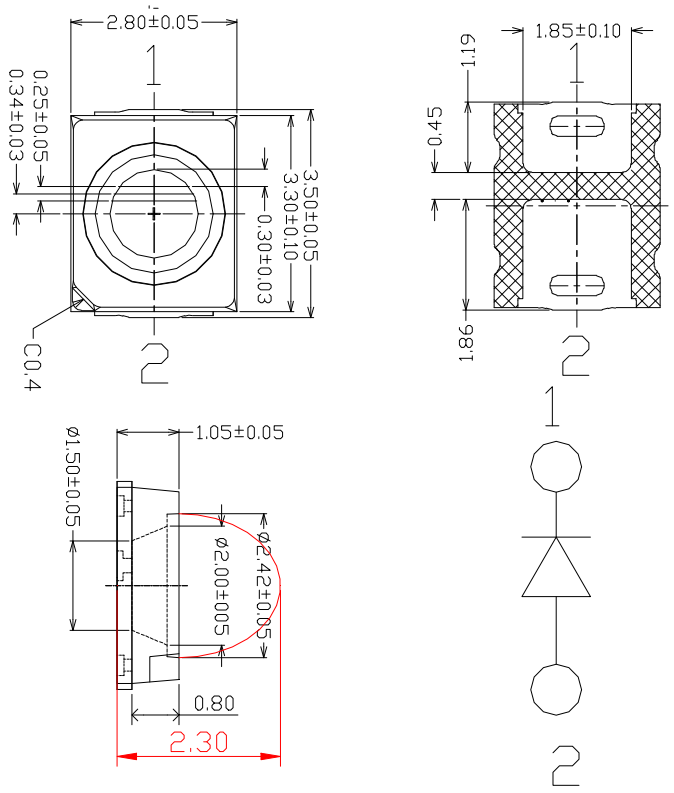
Product Specification Report

客户名称（Customer　Name）：					
客户料号（Customer　NO.）：					
产品名称（Product　Name）：			2835 系列 LED 贴片灯		
产品型号（Product　Type）：			IE-3528Y-HB-L-CY1		
制定日期（Date　Prepared）：			2024-03-06		
			Customer’s　Approval		
Development	Approved	Marketing Dept	Confirmed by	Approved	Purchasing Dept

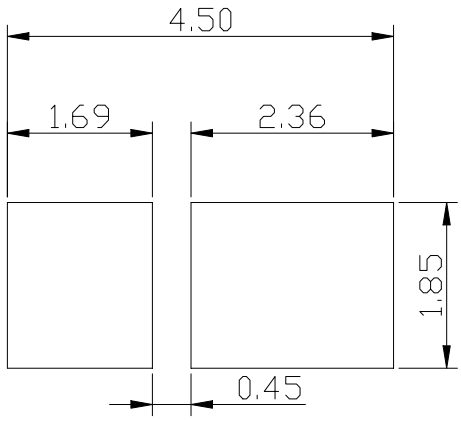
SURFACE MOUNT LED LAMPS

2835 系列 LED 贴片灯

Package Dimensions（封装尺寸）



Recommended Soldering Patter (n 推荐焊盘式样)



备注（NOTES）：

1、 所有尺寸单位为毫米
All dimensions are in millimeters

2、 如无其他备注，尺寸公差为±0.1mm
Tolerances are ±0.1mm unless otherwise note.

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极限参数 Absolute maximum ratings （Ta=25°C）

参数 Parameter	符号 Symbol	数值 Value	单位 Unit
正向电流 Forward current	If	60	mA
反向耐压 Reverse voltage	Vr	5	V
耗散功率 Power dissipation	Pd	132	MW
工作环境温度 Operating temperature range	Top	-25~+80	°C
贮藏温度 Storage temperature range	Tstg	-30~+85	°C
峰值脉冲电流 Peak pulsing current（1/8 duty f=1KHz）	Ifp	100	mA
结温 Junction Temperature	Tj	115	℃
静电 Electrostatic Discharge(HBM)	ESD	1500	V

光电特性 Electro-Optical characteristics (TA=25°C)

参数 Parameter	测试条件 Test Condition	符号 Symbol	颜色	数值 Value			单位 Unit
				Min	Typ	Max	
色温 Color Temperature	IF=60mA	CCT	--	--	--	--	K
正向电压 Forward voltage	IF=60mA	Vf	Y	2.0	--	2.4	V
光通量 luminous flux	IF=60mA	φ	Y	5	--	8	LM
视角 Viewing angle at 50% IV	IF=60mA	2θ1/2	Y	--	30	--	Deg
主波长 Dominant wavelength	IF=60mA	λd	Y	590	--	595	nm
反向电流 Reverse current	Vr=5V	Ir	Y	--	5	--	μA
显色性指数 Color Rendering Index	IF=60mA	CRI	--	--	--	--	Ra

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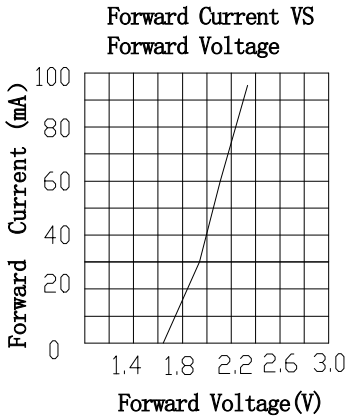
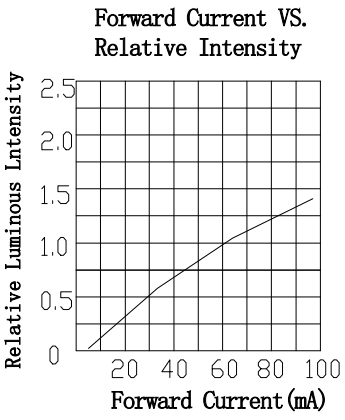
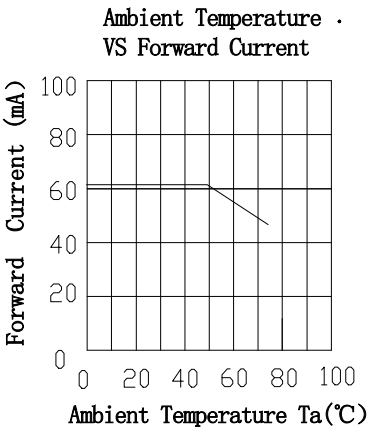
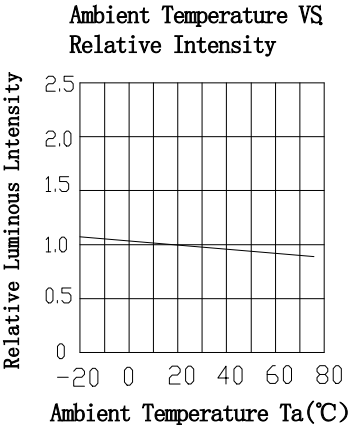
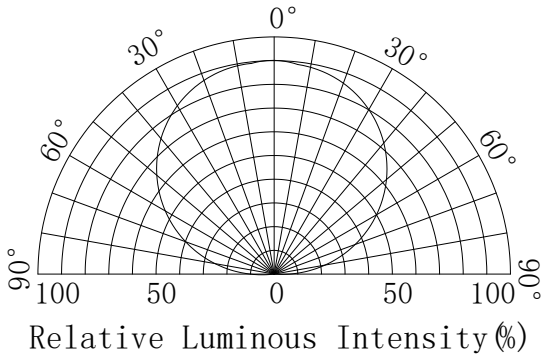
典型的光电特性曲线图表 Typical photoelectricity characteristic curve chart











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类别 Type	测试项目 Test item	参照标准 YK. Standard	测试条件 Test Conditions	备注 Note	数量 Quantity	不良数量 Number of Damaged
Environmental Sequence	高低温循环 Temperature Cycle	JIS C 7021 (1977)A-4	-25°C 30min ↑↓5min 80°C 30min	100 cycle	22	0
	热冲击 Thermal Shock	MIL-SLD-107D	-25°C 15min ↑↓5min 80°C 15min	50 cycle	22	0
	高温度热循环 High Humidity Heat Cycle	JIS C 7021 (1977)A-5	30°C〈=〉65°C 90%RH 24hrs/1cycle	10 cycle	22	0
	高温存储 High Temperature Storage	JIS C 7021 (1977)B-10	T_a=80°C	1000hrs	22	0
	高温高湿存储 Humidity Heat Storage	JIS C 7021 (1977)B-11	T_a=60°C RH=90%	1000hrs	22	0
	低温存储 Low Temperature Storage	JIS C 7021 (1977)B-12	T_a=－30°C	1000hrs	22	0
Operation Sequence	常温寿命测试 Life Test	JIS C 7035 (1985)	T_a=25°C I_F=60mA	1000hrs	22	0
	高温高湿寿命测试 High Humidity Heat Life Test	*	60°C RH=90% I_F=60mA	500hrs	22	0
	低温寿命测试 Low Temperature Life Test	*	Ta=-25°C I_F=60mA	1000hrs	22	0

✱请参考可靠性测试标准规范。Refer to reliability test standard specification for in this line.

失效判定标准　Criteria For Judging Damage

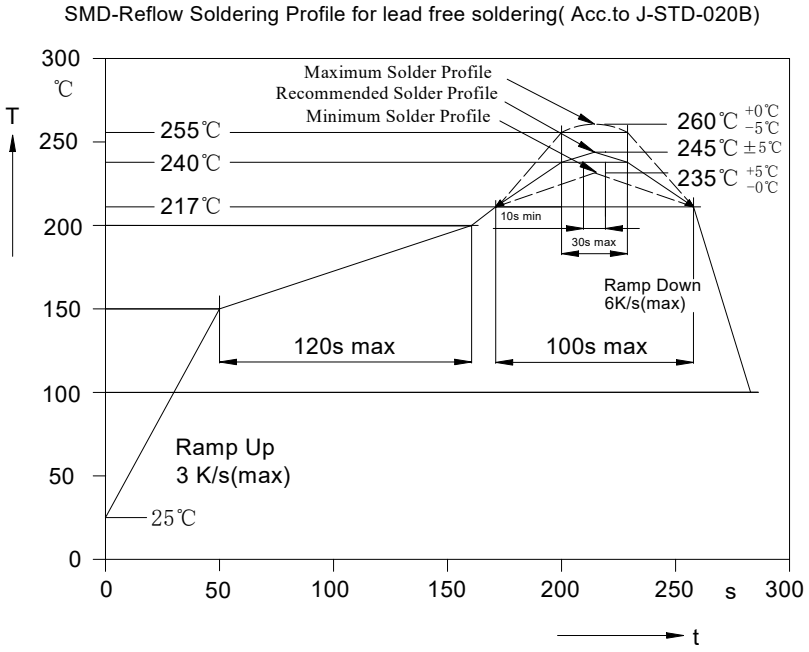
测试项目	符号	测试条件	判定标准
正向电压 Forward Voltage	V_F	I_F=I_{FT}	初始值±10% Initial Data±10%
反向电流 Reverse Current	I_R	V_R=5V	I_R≦10μA
光强 Luminous Intensity	I_V	I_F=I_{FT}	平均 I_V 衰减≦30%，单个平均 I_V 衰减≦50% Average I_V degradation≦30% Single LED I_V degradation≦50%
耐焊接热 Resistance to Soldering Heat	--	--	材料无内部裂痕、无材料间爆裂、剥离、无死灯 Meterial without internal cracks, no material between stripped, no deaded light.

SURFACE MOUNT LED LAMPS

焊接指导　Guideline for Soldering

1、 回流焊接：推荐以下无铅回流焊接温度图进行。

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



Remark: If not lead free soldering, the recommended solder profile is 230℃and max solder profile is 245℃.

2、 使用烙铁人手焊接 Hand Soldering

1)、 推荐使用低功率于 20W 的烙铁，焊接时烙铁的温度必须保持在 360℃以下，且每个电极只能进行一次焊接，每次焊接的持续时间不得超过 3 秒。

A soldering iron of less than 20W is recommended to be used in Hand Soldering Please keep the temperature of the soldering iron under 360℃ while soldering Each terminal of the LED is to go for less than 3 second and for onetime only.

2)、 人手焊接过程中的不慎操作易引起 LED 产品的损坏，应当小心谨慎。

Be careful because the damage of the product is often started at the time of the hand soldering.

3、 清洗 Cleaning

1）、在焊接后推荐使用酒精进行清洗，在温度不高于 30℃的条件下持续 3 分钟，不高于 50℃的条件下持续 30 秒，使用其他类似溶剂清洗前，请先确认使用的溶剂不会对 LED 的封装和环氧树脂造成损伤。

It is recommended that alcohol be used as a solvent for cleaning after soldering. Cleaning is to go under 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.

2）、超声波清洗也是有效的方法，一般最大功率不应超过 300W，否则可能对 LED 造成损伤，请根据具体的情况预先测试清洗条件是否会对 LED 造成损伤。

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