

产 品 规 格 书

SPECIFICATION FOR APPROVAL

规格书编号:

SPEC NO. : LKL-GD-202608

客 户 名 称

CUSTOMER NAME :

产 品 名 称

PRODUCT NAME : SMD 2835- 3V

规 格 型 号

PART NO. : LKL-2835A05RA-BE00-03MG-NIN (Red)

客 户 型 号

CUSTOMER PART NO. :

日 期

DATE : 2026-08-03

样品确认后, 请回签一份“产品规格书”。

Please confirm and sign, then return a copy.

规格书/SPECIFICATION FOR APPROVAL		
批 准 APPROVED BY	审 核 CHECKED BY	编 制 REPORTED BY

客户确认/CUSTOMER APPROVAL		

■ 特点:

Features:

1.寿命长.

Very long operating life.

2.低直流电压工作.

Low voltage DC operated.

3.光线均匀, 可安全接触.

Cool beam,safe to the touch.

4.瞬时点亮(点亮时间小于 100 纳秒).

Instant light(less than 100ns).

5.超强抗静电能力.

Superior ESD protection.

6.GaN/蓝宝石衬底小功率 LED 芯片.

Small Power GaN/Sapphire LED Chip.

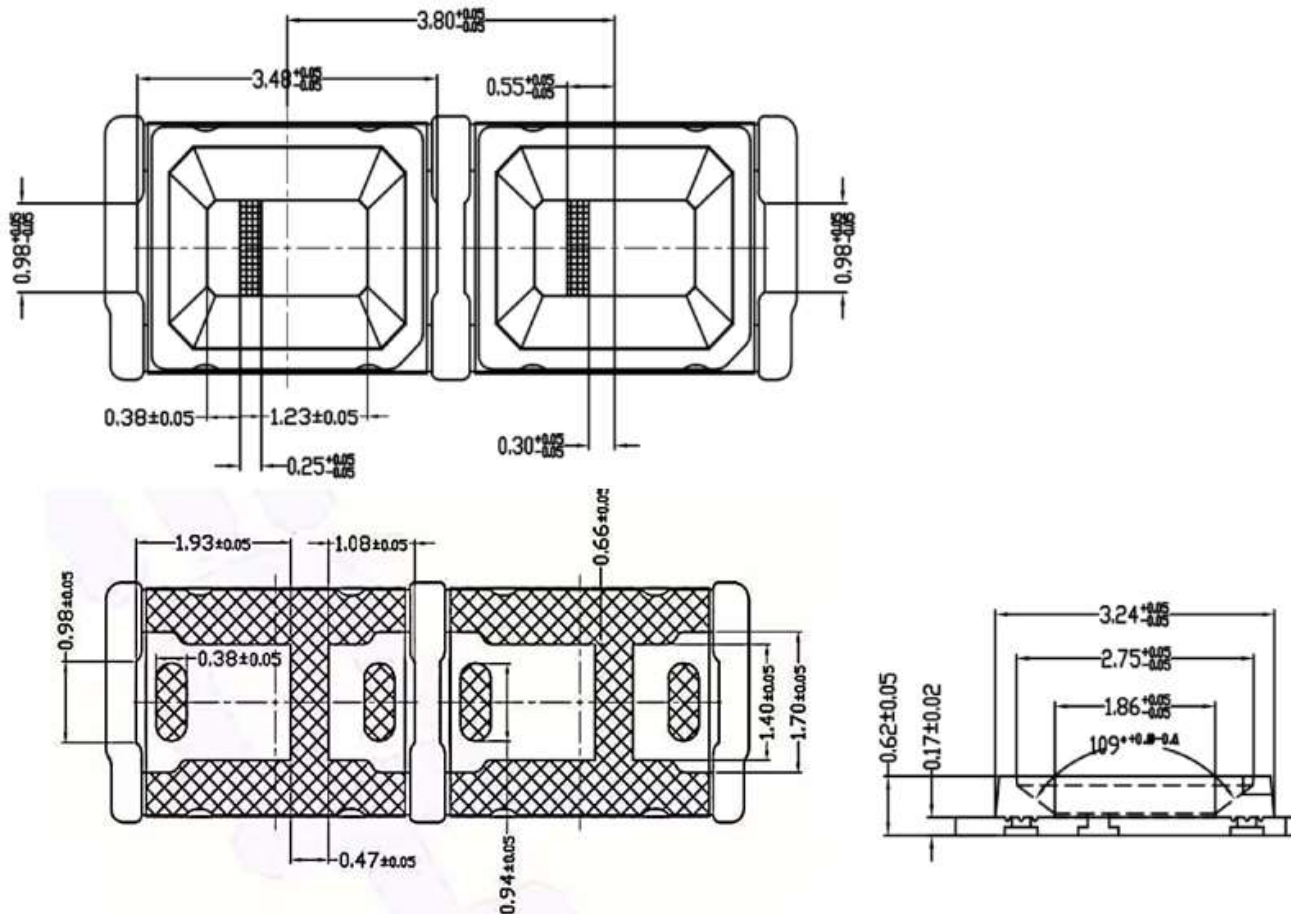
7. 颜色:红光.

Source Color: Red.



■ :封装尺寸

Package Dimensions



注意:

Note:

1. 所有尺寸为毫米 (或者英寸)

All dimensions are in millimeters (inches)

2. 若无特殊说明, 允许公差均为 $\pm 0.25\text{mm}$ ($0.010''$)

Tolerance is $\pm 0.25\text{mm}$ ($.010''$) unless otherwise noted

3. 产品规格和内容,如有更改,恕不另行通知.

Specifications are subject to change without notices.

光电特性 $T_A = 25^\circ\text{C}$

Electrical / Optical Characteristics at TA=25° C

符号 Symbol	名称 Parameter	颜色 Device	最小值 Min.	中间值 Typ.	最大值 Max.	单位 Units	测试条件 Test Conditions
λ 峰值 λ_{peak}	峰值波长 Peak Wavelength	红光 Red	640		650	nm	IF=150mA
λ_D	主波长 Dominate Wavelength	/	/	/	/	nm	IF=150mA
$\Delta \lambda_{1/2}$	谱线半宽 Spectral Line Half-width	/	/	/	/	nm	IF=150mA
V _F	正向电压 Forward	/	3.0	/	3.4	V	IF=150mA
X/Y	相对坐标 Color Rendering Index Calculation	/	/	/	/	/	IF=150mA
CCT	色温 Color Temperature	/	/	/	/	K	IF=150mA
Φ_v	光通量 Luminous Flux	红光 Red	10	/	12	LM	IF=150mA

绝对最大值 TA=25° C

Absolute Maximum Ratings at TA=25° C

参数 Parameter	参数 Parameter	单位 Units
辐射功率 Power dissipation	300	mW
正向电流 DC Forward Current	100	mA
正向瞬间峰值电流 Peak Forward Current	120	mA
静电 Electrostatic Discharge(HBM)	1000	V
储存温度 Storage Temperature Range	-40 ~ +100	°C
结温（芯片） Junction Temperature (Die)	125	°C

注意:

Note:

1/10 占空比, 0.1ms 脉冲宽度.

1/10 Duty Cycle, 0.1ms Pulse Width.

使用要求及注意事项:

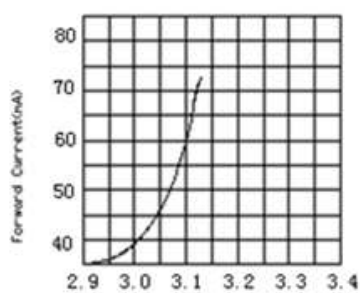
- 1: 不能挤压灯珠表面胶体;
- 2: 注意防硫, 防磷, 防潮;
- 3: 不可使用超出灯珠要求电流, 电压的驱动;

Usage requirements and precautions:

- 1: the surface colloid of lamp bead cannot be extruded;
2. Pay attention to preventing sulfur, phosphorus and moisture;
- 3: do not use the drive beyond the required current and voltage of the lamp bead;

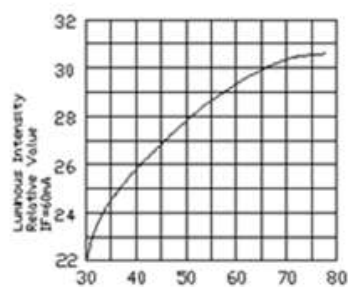
■ 典型光电特征曲线 (若无特别标注, 环境温度为 25℃ 常温)

Typical Electrical/Optical Characteristics Curve: (25℃ Ambient Temperature Unless Otherwise Noted)



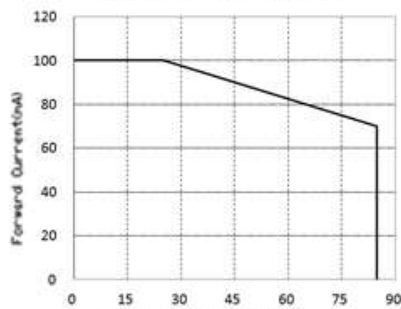
forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE

正向电流与正向电压关系曲线图



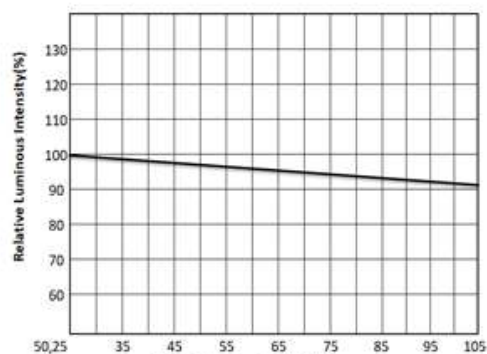
IF-forward current(mA)
LUMINOUS INTENSITY Vs
FORWARD CURRENT

亮度与正向电流关系曲线图



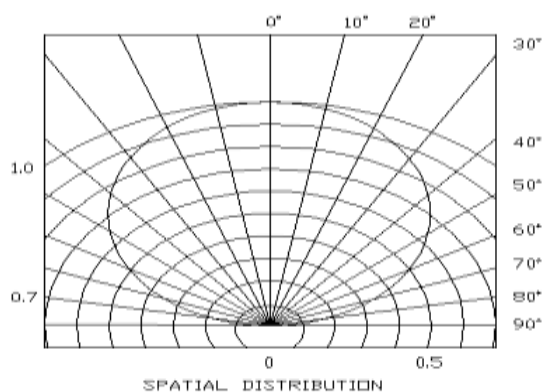
Ts Temperature Ts(°C)
FORWARD CURRENT
DERATING CURVE

正向电流递减曲线图



Ambient Temperature Ta (°C)
LUMINOUS INTENSITY Vs AMBIENT TEMPERATURE

亮度与环境温度关系曲线图



发光角度图解

Reliability Test Items And Conditions 信赖性测试项目及条件

Test Items 项目	Ref Standard 参考标准	Test Condition 测试条件	Time 时间	Quantity 数量	Ac/Re 接收/拒收
Reflow 回流焊	JESD22-B106	Temp:260℃ max T=10 sec	3times.	22pcs.	0/1
Thermal Shock 冷热冲击	JESD22-A104	125℃ ± 5℃ 30min. ↑ ↓ 5min. -40℃ ± 5℃ 30min.	100 Cycles	22pcs.	0/1
High Temperature Storage 高温保存	JESD22-A103	Temp:100℃ ± 5℃	1000Hrs.	22pcs.	0/1
Low Temperature Storage 低温保存	JESD22-A119	Temp:-40℃ ± 5℃	1000Hrs.	22pcs.	0/1
High Temperature Life Test 高温通电	JESD22-A108	Ta=85℃ ± 5℃ IF=100mA	1000Hrs.	22pcs.	0/1
High Temperature High Humidity Life Test 高温高湿通电	JESD22-A101	85℃ ± 5℃ / 85%RH IF=100mA	1000Hrs.	22pcs.	0/1

Criteria For Judging Damage 失效判定标准

Test Items 项目	Symbol 符号	Test Condition 测试条件	Criteria for Judgement 判定标准	
			Min.最小	Max.最大
Forward Voltage 正向电压	VF	IF=100mA	- -	U.S.L*) × 1.1
Reverse Current 反向电流	IR	VR=5V	- -	10uA
Luminous Flux 光通量	Lm	IF=100mA	L.S.L*) × 0.7	- -

U.S.L:Upper Specification Limit 规格上限

L.S.L:Lower Specification Limit 规格下限

*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products.It does not constitute the warranting of industrial property nor the granting of any license.

数据工作表中所示的技术信息仅限于典型特征和电路实例引用的产品,它既不构成工业特征的保证,也不构成任何许可的授权。

(1) 光通量分档(IF=150mA)**Luminous Flux Bin Limits(IF=150mA)**

Range (范围)	10-12LM √	/	/	/	统货(不分光通量) Irrespective of luminous flux
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每档容许误差±10%.

Tolerance for each Bin limit is ±10%.

(2) 色温分档(IF=150mA)**CCT Bin Limits (IF=150mA)**

色温 CCT	/	/	/	/	统货 All products
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每档容许误差±10%.

Tolerance for each Bin limit is ±10%.

(3) 正向电压分档(IF=150mA)**Forward Voltage Bin limits(IF=150mA)**

Range (范围)	3.0-3.1 √	3.1-3.2 √	3.2-3.3 √	3.3-3.4 √	统货(不分电压) Irrespective of voltage
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分档容许误差±0.1v.

Tolerance for each Bin limit is ±0.1v.

(4) 显数指数分档(IF=150mA)**Ra Bin Limits (IF=150mA)**

Range (范围)	无显指要求 √	70	75	80	85	90	95	98
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每档容许误差±10%.

Tolerance for each Bin limit is ±10%

备注：保证散热前提条件为：引脚最高温度为 **85℃**，在此温度以下，散热符合产品寿命要求。

Note: ensure that cooling condition is: the pin maximum temperature is **85℃**, under this temperature, cooling conform to the requirements of the product life.

注意

Cautions:

1. 使用该产品，需要将灯珠置于散热器上，或者加快散热，以确保点亮并长寿命

Used this products , your may put the POWER LED lose hot chips and touch the lose hot install or enlarge the lose hot condition , so that when the lighting ,the products can lose hot , make sure that the lighting and long lifespan .

- 2 不良灯珠会有如下特征：漏电显著增加，启动电压降低，低电流不能点亮等情况.

Damaged POWER LED will show unusual characteristics such as leak current remarkably increase, turn-on voltage becomes lower and the POWER LED get unlight at low current.

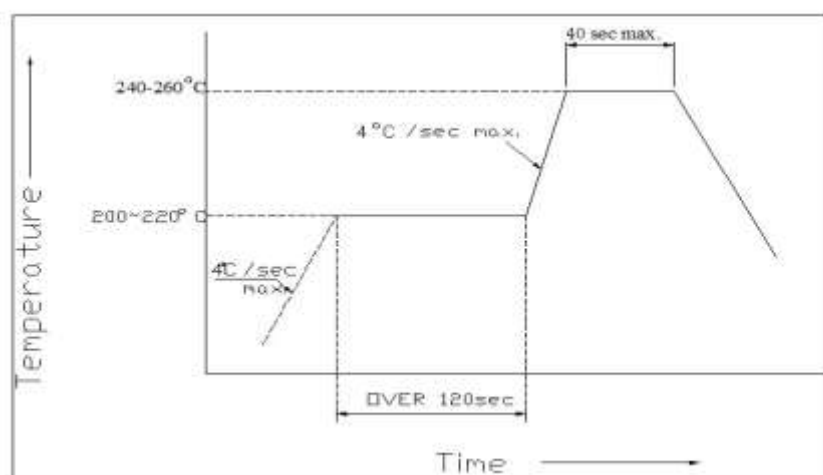
回流焊指导说明

H-POWER Reflow Soldering Instructions

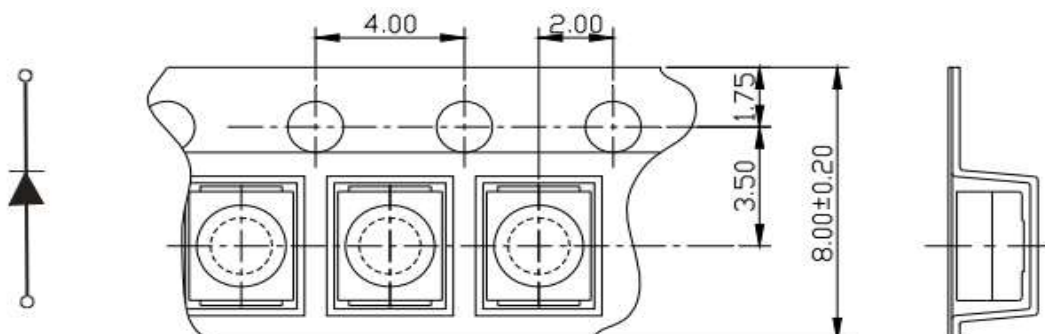
回流次数不超过 2 次，且两次回流焊之间需灯珠冷却充分

Number of reflow process shall be less than 2 times and cooling

process to normal temperature is required between first and Second soldering process.



装带规格(Tape Specifications)



单位: mm, 未注公差: ±0.1 mm
All dimensions in mm, tolerances unless mentioned is ±0.1 mm.