SPECIFICATION

ALS530.17.08 3030 CT11

Customer part number Par tnumber:	
Product model Part No.:	**LLN-3E17-XXXX-S-0402-3030-24-7469-A**
product description Description:	Down panel light bar
edition Version:	**A0**

Supplier (seal)			Client (seal)
lay down	examine and verify	ratify	examine and verify
Li Zhidan			

Note: After confirming OK, please sign and seal the letter of recognition; the letter of recognition shall be based on the latest signing date, and the original old version of the letter of recognition will automatically become invalid after the version upgrade.

Supplier name: Nanchang Yimei Optoelectronic Technology Co., LTD
Supplier address: No.600, Hongguang Second Road, Changdong Town, High-tech Zone, Nanchang City, Jiangxi Province
Tel: (0791) -88130117-8018 Email Email:light_sales@shineon.cn Website/Web:www.shineon.cn

Update your resume

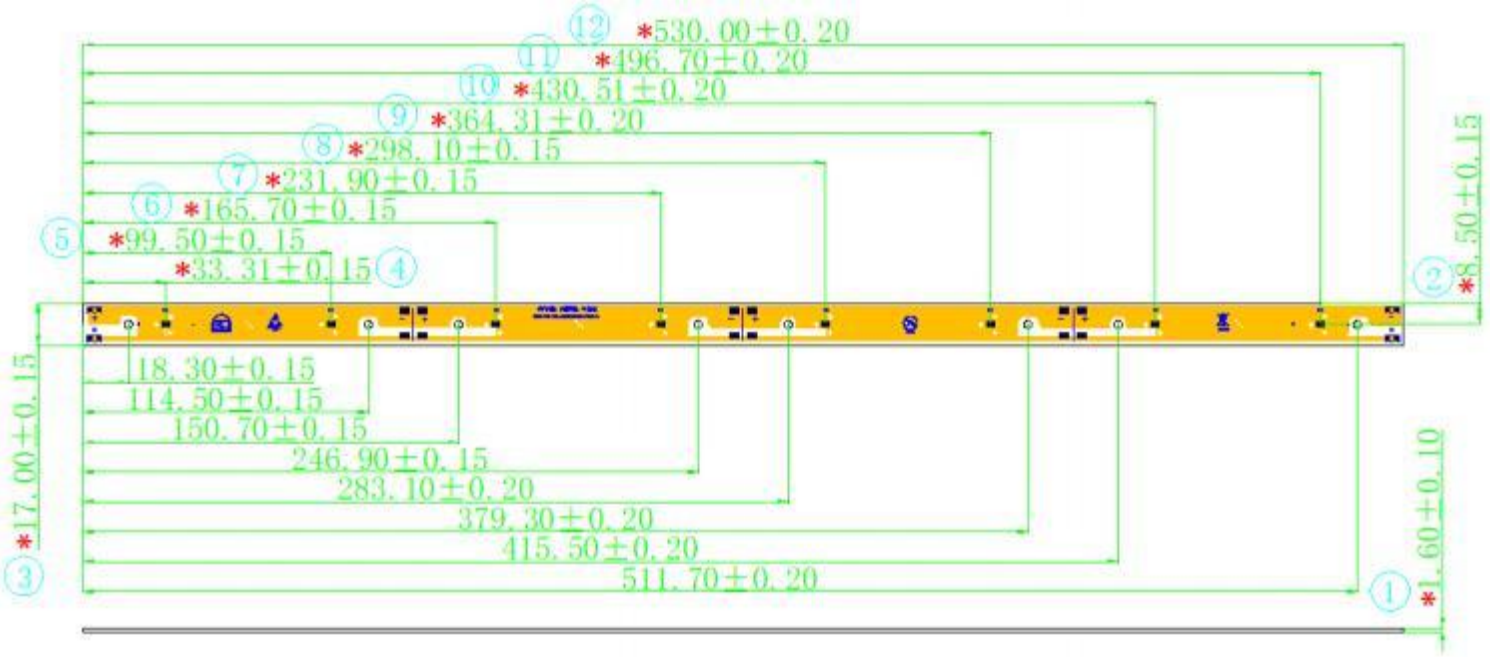
edition	Describe the change	date
A0	First edition	**2025-07-01**

Document resume

Drafted/revise by	Modify the content summary	Version/edition	Revise page numbers	Revision date
Li Zhidan	initial issue	A		2025-07-01

catalogue

1. Light bar size diagram



(unit： mm)

encoding	project	representative value	common difference
1	PCB length	530	±0.2
2	PCB width	17	±0.15
3	PCB thickness	1.6	±0.1

2. Light bar circuit diagram

3. Light bar characteristics table

Light bar main material

project	quantity (pcs)	content
basilar plate	1	M08-XX-DCL-30-0402-N-7469-A FR4,1.6T,1OZ
LED	8	3030A06-XXS10-2S2P-PT10-LX
lens	8	PMMA material φ13.5mm lens

Maximum limit value

project	content
storage temperature	-20~+70℃
High temperature and high humidity storage	Max.90 % @ Ta 60℃
working temperature	-20~+60℃
High temperature and humidity work	Max.90 % @Ta 50℃
PCB current-carrying	≤2400mA
PCB copper thickness (finished product)	≥30um
- LENS push-pull effort	The thrust parallel to the long side is greater than or equal to 8kg/f
	The tensile force perpendicular to the PCB surface is greater than or equal to 4kg/f

electrical characteristics

project	least value	representative value	crest value	unit
working current	_	300	_	mA
Working voltage (If = 300mA)	21.6	23.4	24.8	V

Note: In order to ensure the performance of L/B, it is recommended that the operating current be controlled within the typical value.

Light parameters: working current 300mA

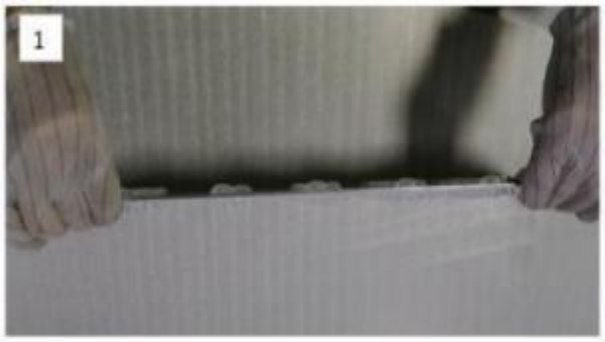
CCT	CCT Range(K)	Color bin	Center		Flux(lm)			Ra	R9	SDCM
			CIE-x	CIE-y	Min	Typ	Max			
4000K	3763-4228	A40	0.3818	0.3797	1150	1230	1320	≥90	> 50	≤3
5000K	4738-5343	A50	0.3447	0.3553	1150	1230	1320	≥90	> 50	≤3

4. Light bar packaging specifications

(1) Packaging information

Each piece is counted (PCS)	quantity per pack (PCS)	total quantity (PCS)	total weight (Kg)	carton size （mm）		
				long	wide	tall
10	20	600	12.5	540	215	210

(2) Packaging diagram:



1. Put 10 pieces of loose board together, and stack the light strips back to back. 2. Wrap the stacked light strips with foam

3. Each panel is 10 pieces, one package is 2 panels, that is, 20 pieces 4. One box contains 30 packages

5. Wrap the box with transparent tape

6. Paste the label on the outer box marking area, and fill in the label content according to the actual quality, weight and BIN

(3) Example of label format:

Material shipping label	
Customer product model	
Customer product order number	
Shineon product model	
Bin price	
Quantity （Pcs）	
Date	
OQC judge	

5. LED characteristics

Light flux Φ (tolerance: ±5%):

Color Bin color area	Light flux @150mA	
	Φ Min.（lm）	Φ Max.（lm）
A40	140	150
A50	140	150

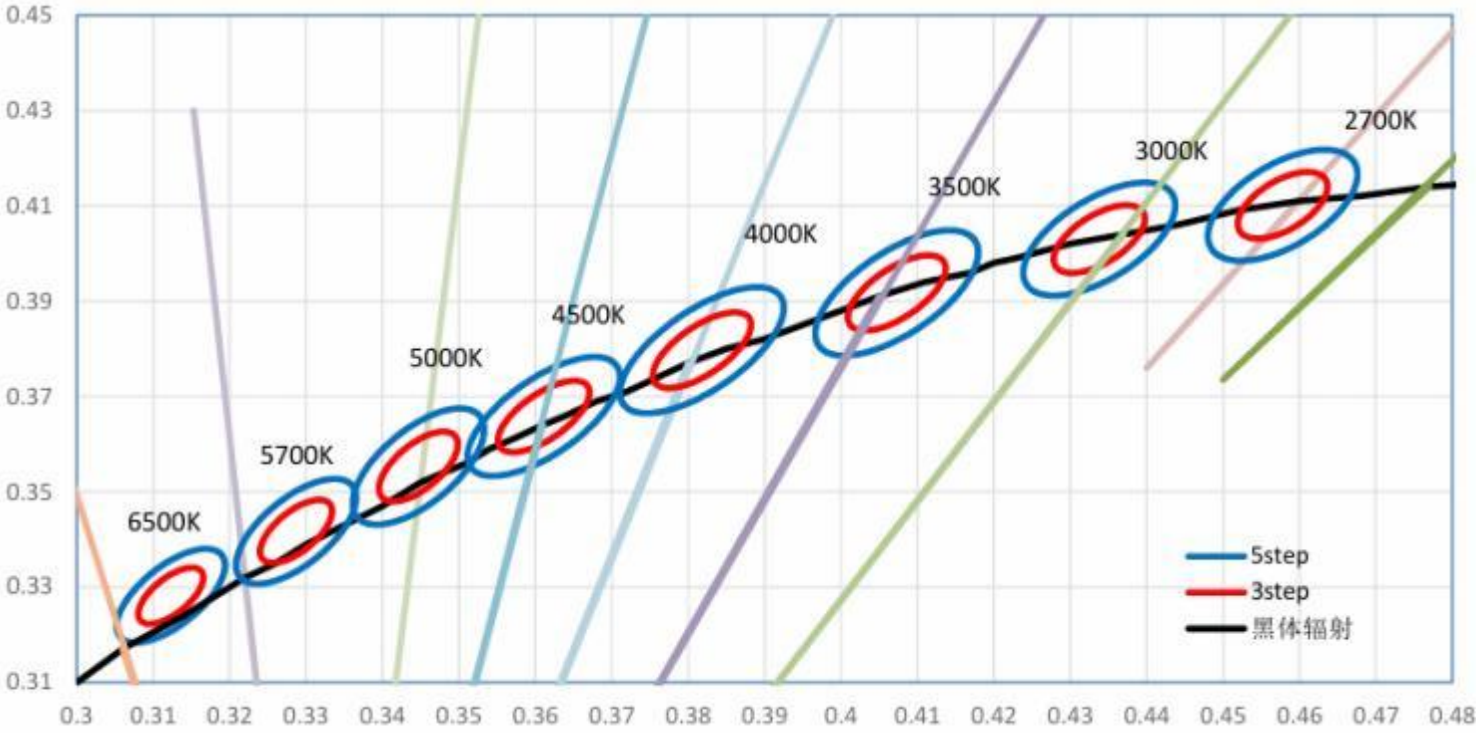
Lamp voltage bin

Voltage BIN code	**150mA**	
	Min.（v）	**Max.（v）**
C73	**5.5**	**5.7**
C83	**5.7**	**5.9**

Notes:

1. The luminous intensity tolerance of 5% may be caused by the measurement inaccuracy. The light flux measurement accuracy error ±5%
2. Measurement Uncertainty of the Forward Voltage : ±0.1.
   Forward voltage measurement error: ±0.1

Chromaticity bins are color coordinates (Tj=25°C) ANSI



标准 standard	ANSI （ANSI C78.377:2008）							
	中心色温 Center color temperature	X	Y	θ	3step		5step	
					a	b	a	b
ANSI 6500	6530K	0.3123	0.3282	58.567	0.00669	0.00285	0.01115	0.00475
ANSI 5700	5665K	0.3287	0.3417	59.128	0.00746	0.00320	0.01243	0.00533
ANSI 5000	5028K	0.3447	0.3553	59.617	0.00822	0.00354	0.0137	0.00590
ANSI 4500	4497K	0.3611	0.3658	53.717	0.00939	0.00402	0.01565	0.00670
ANSI 4000	3985K	0.3818	0.3797	53.717	0.00939	0.00402	0.01565	0.00670
ANSI 3500	3466K	0.4073	0.3917	54	0.00927	0.00414	0.01545	0.00690
ANSI 3000	3045K	0.4338	0.403	53.217	0.00834	0.00408	0.01390	0.00680
ANSI 2700	2725K	0.4578	0.4101	53.17	0.00774	0.00411	0.01290	0.00685

6. Maximum limit value of LED (ambient temperature = 25℃):

Parameter 项目名称	Symbol 符号	Value 规格	Unit 单位
Forward current 正向电流	IF	180	mA
Peak Forward Current 正向脉冲电流	IFP	300	mA
Power Dissipation 消耗功率	Pd	1000	mW
Operating Temperature 工作温度	Topr	-40~+85	℃
Storage Temperature 储存温度	Tstg	-40~+100	℃
Soldering Temperature 焊接温度	Tsld	Reflow Soldering: 260℃ for 10 seconds	
LED Junction Temperature 结温	Tj	125	℃
ESD Sensitivity (HBM) 抗静电能力	--	2000	V

* IFP condition: pulse width ≤ 0.1msec, period ≤ 1/10

7. LED photoelectric characteristic parameters (ambient temperature =25℃)

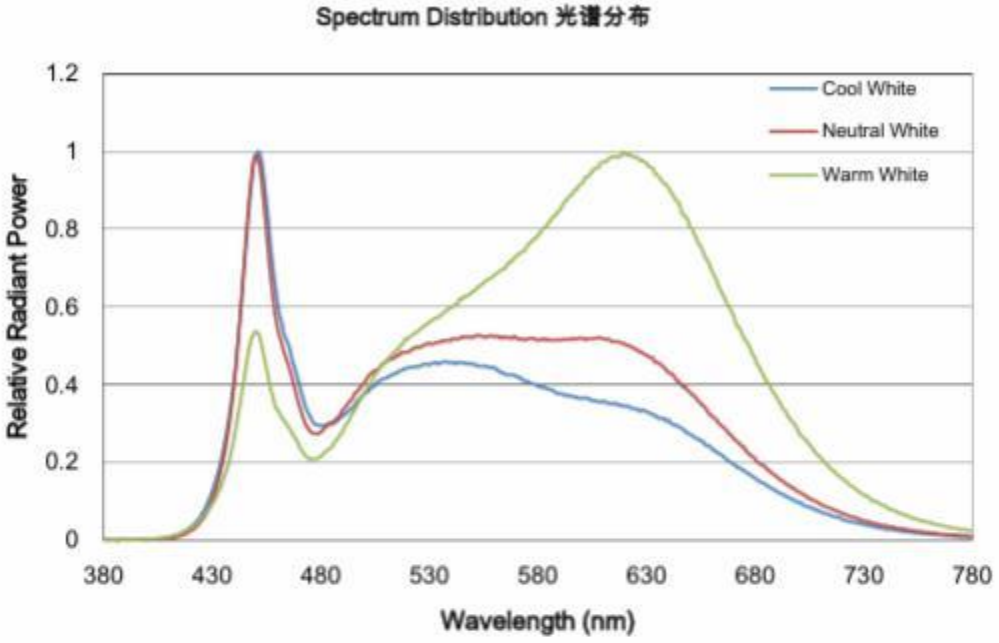
Parameter 项目名称	Symbol 符号	Test Condition 测试条件	Min 最小值	Typ 典型值	Max 最大值	Unit 单位
Forward Voltage 正向电压	V_F	IF=150mA	5.5	5.6	5.9	V
Viewing Angle 发光角度	$2\theta_{1/2}$	IF=150mA	--	120	--	deg.
Luminous Flux 光通量	Φv	IF=150mA	120	--	150	lm
Color Rendering Index 显色指数	CRI	IF=150mA	90	--	--	--
Color Temperature 色温	CCT	IF=150mA	2600	--	7000	K
Thermal Resistance 热阻	R_{th-js}	IF=150mA	--	12	--	℃/W

Notes pour：

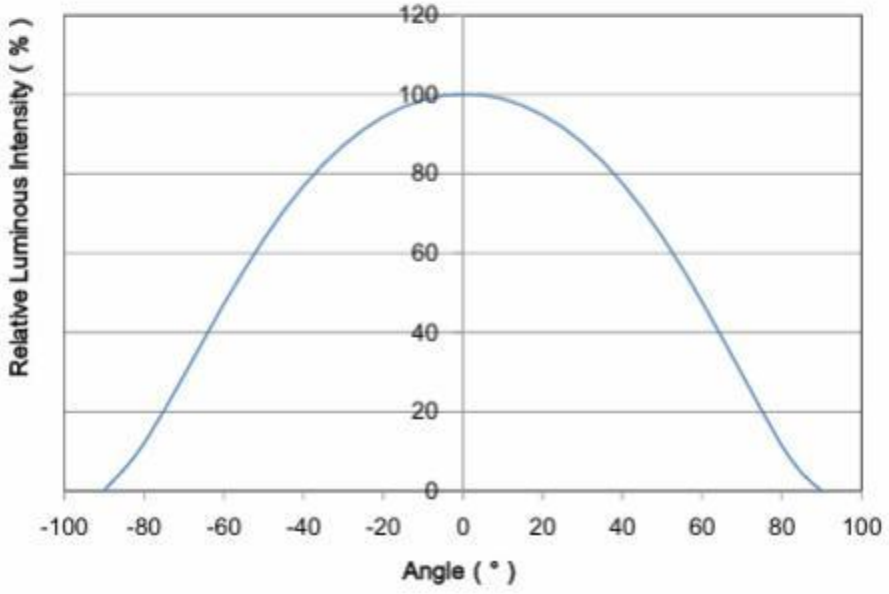
1. Luminous flux is measured with an accuracy of ±5%.
The measurement accuracy of light flux is ±5%
2. Chromaticity coordinate bins are measured with an accuracy of ±0.01. The relative measurement accuracy of chromaticity coordinates is ±0.01
3. CRI is measured with an accuracy of ±2.
The measurement accuracy of color rendering index is ±2
4. Some colors and CRI bins may be limited in availability, please contact us before ordering. Some colors and CRI bins may be limited in availability, please contact us before ordering
5. All measurements were made in the standardized environment of Shineon. All measurements were made in the standard environment of Emei

8. Typical photoelectric parameter curve of LED

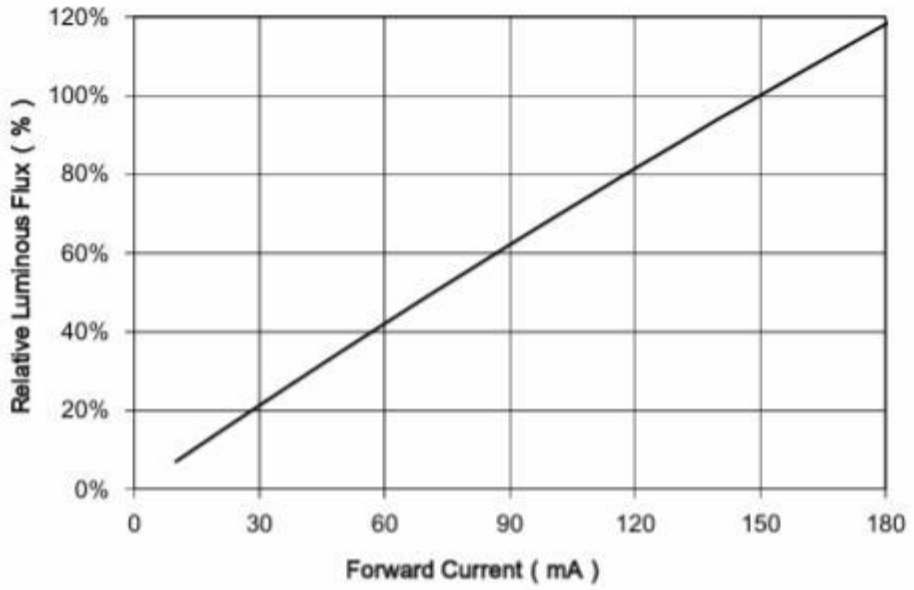
RELATIVE SPECTRAL POWER DISTRIBUTION 相对光谱功率分布 (T_j=25℃)



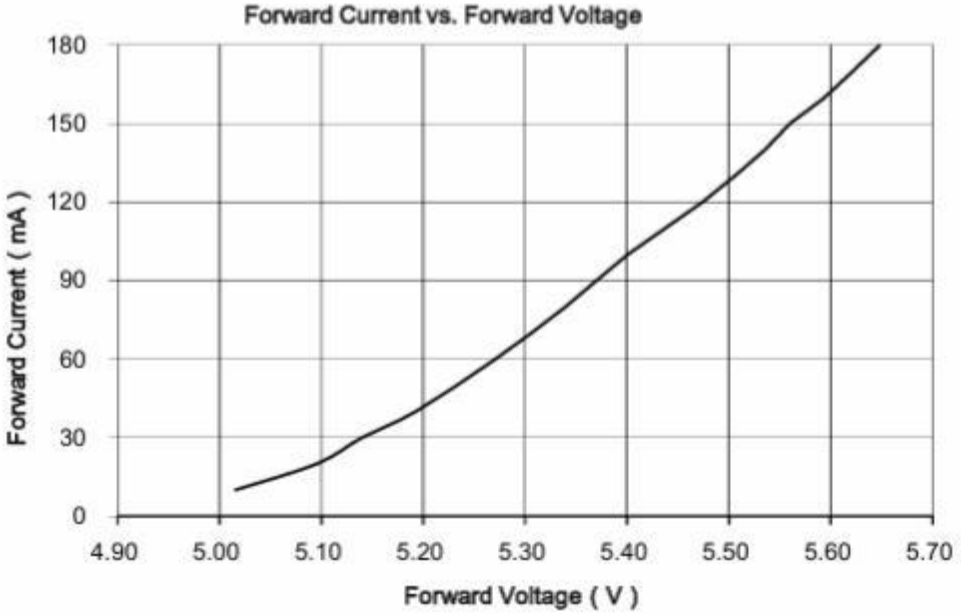
TYPICAL SPATIAL DISTRIBUTION 典型配光分布



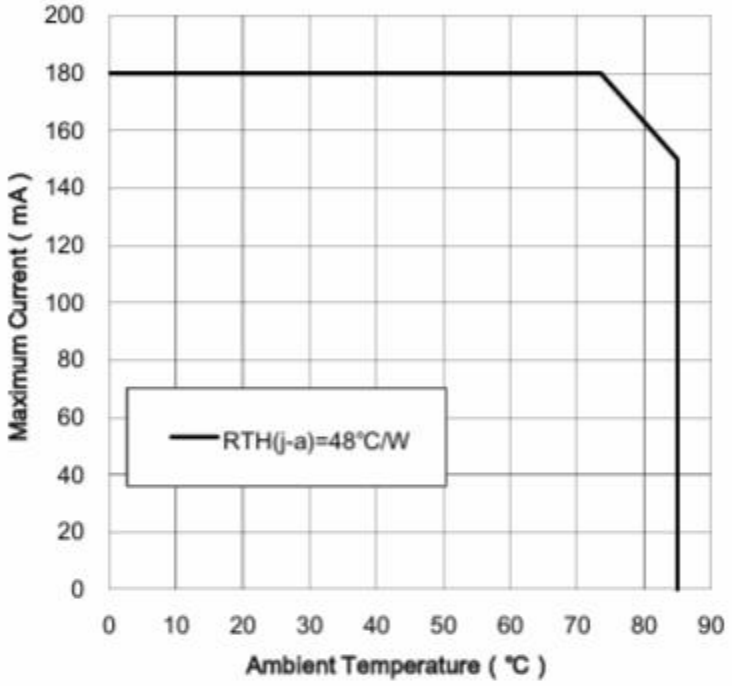
RELATIVE LUMINOUS FLUX VS. CURRENT相对光通量VS电流 (T_j=25℃)



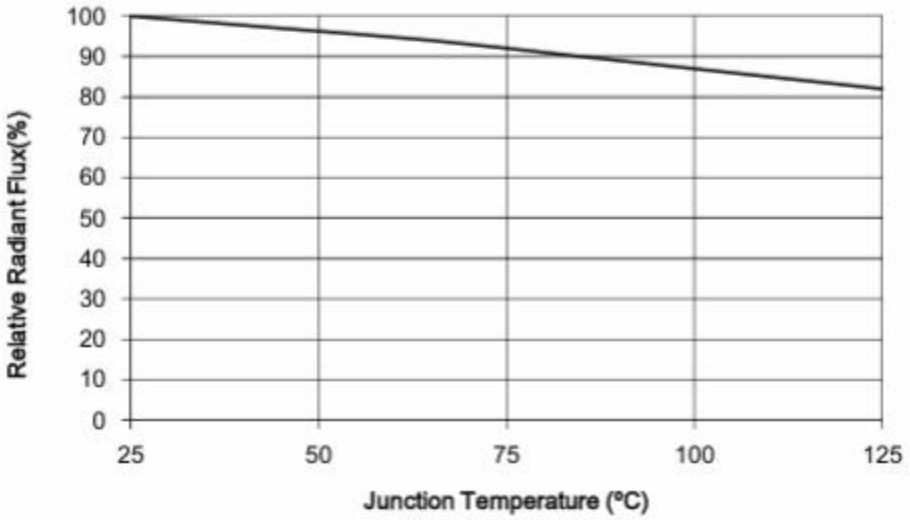
ELECTRICAL CHARACTERISTICS电特性 (Tj=25℃)



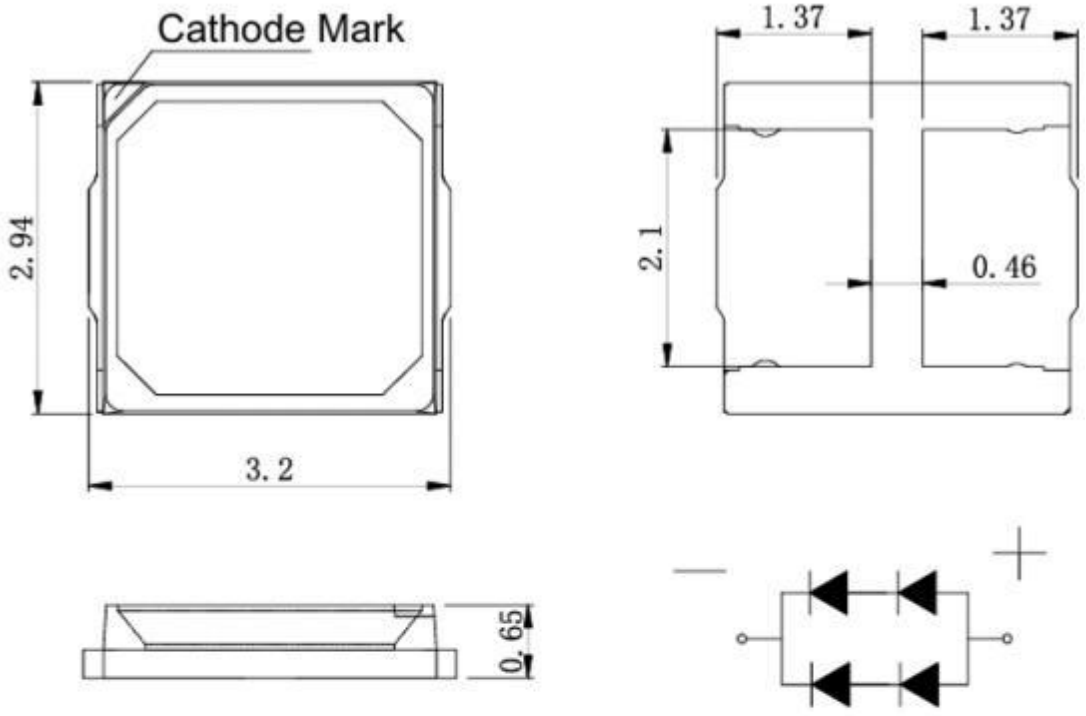
MAXIUM CURRENT VS. AMBIENT TEMPERATURE最大电流VS环境温度



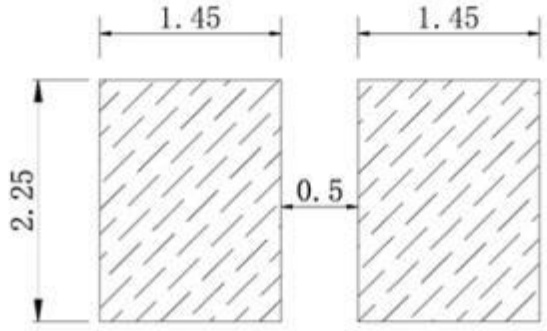
RELATIVE RADIANT FLUX VS. JUNCTION TEMPERATURE相对辐射通量VS结温



9. LED, structural size diagram



Recommended Solder Pad Design 推荐焊盘设计



Notes/ Remarks:

1. All dimensions are in mm.
2. The thickness tolerance of copper plate is ±0.02mm.
3. The thickness tolerance of the product is ±0.05mm. The thickness tolerance of the product is ±0.05mm.
4. Tolerance is ±0.1mm unless otherwise noted. If not specified, the default tolerance is ±0.1mm.

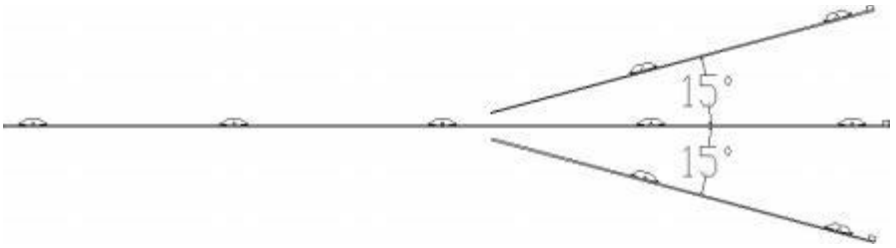
10. Application precautions

1) The LED strip should be stored in an environment of 20-30°C, relative humidity of 60% or less. Avoid direct sunlight, and the longest storage time should not exceed 6 months.

2) Wear gloves when taking and putting the lamp bar, and install it correctly on the customer's product. The LED lamp bar should not be bent.

Bending may cause the LED to come loose or the line to break.

If the PCB bends more than 15 °, the lens will fall off.



3) The LED strip is correctly connected to the circuit and avoids mechanical impact to avoid damage to the strip.

4) When using LED light bar, the heat generation must be taken into account in the overall design. The light bar should not be suspended and should be in close contact with the housing to prevent the LED from being burned out when the temperature is too high.

5) When using LED light bar, resistance or drive protection must be applied, otherwise large current and high voltage will cause LED damage and wavelength shift.

6) Manual repair of LED light bar may cause damage to the chip, so it is recommended to use a heating platform and the temperature should be controlled at 230-260 degrees for 5 seconds.

7) The damaged LED will show abnormal characteristics such as significant increase in leakage current, low forward voltage and the LED is not lit by small current.

8) Warning: Do not look directly at the LED lighting as it may hurt your eyes