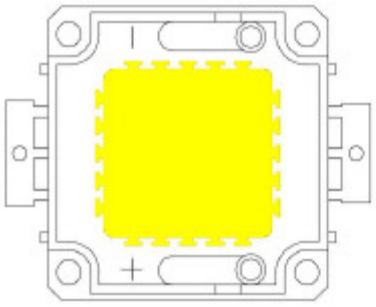
100W-FL COB CW

特 性 (Feature)



尺寸 (Dimension) 52mm * 42mm * 4.3mm

节 能(Energy saving)

寿命长(Long life)

响应速度快(The second level response speed)

环 保(Environmental protection)

手工焊接 (Manual Soldering)

应 用 (Applications)

普通照明 General Lighting

广 告 灯 Advertisement lighting

建筑照明 Architectural Lighting

路 灯 Street Lighting

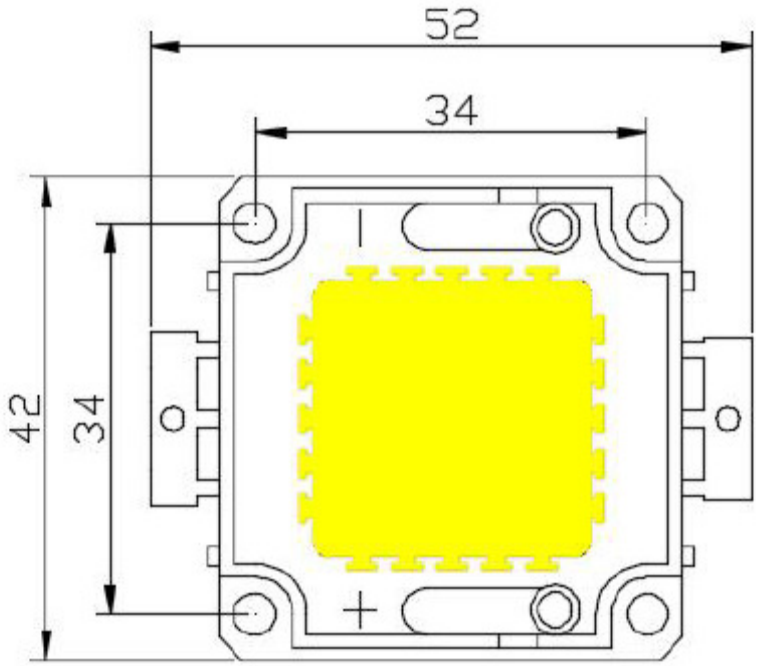
ATTENTION注意

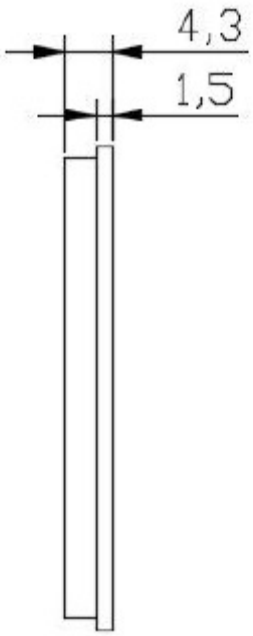
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

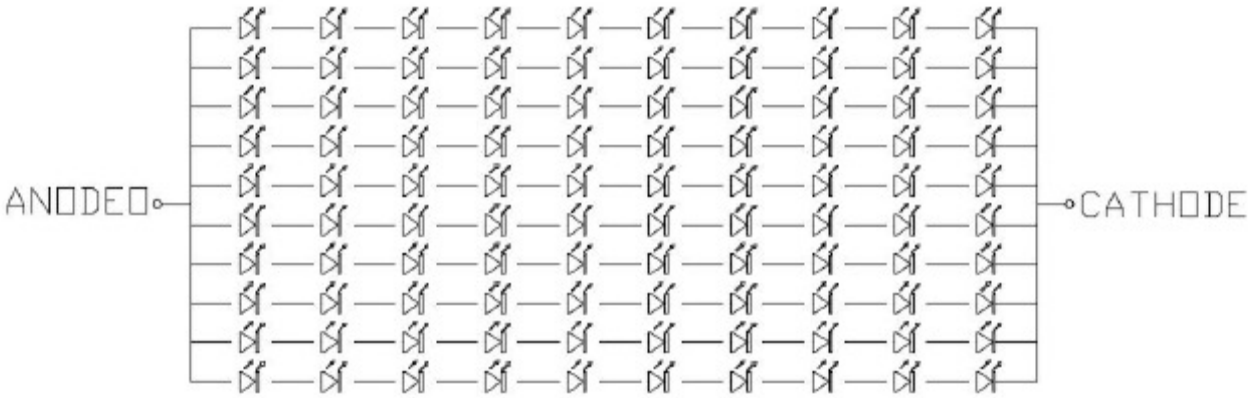
请勿裸手接触器件

100W-FL COB CW

外观尺寸（Package Outline）

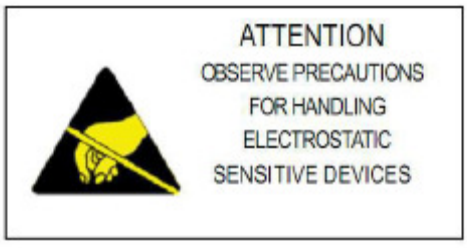






注意：

1. 所有尺寸以毫米为单位（All dimensions are in millimeters.）
2. 公差为： 0.25（Tolerance is 0.25 unless otherwise noted.）
3. 在安装过程中一定要做好防静电措施。



100W-FL COB CW

光电参数(Electro-Optical Characteristics Ta=25℃)

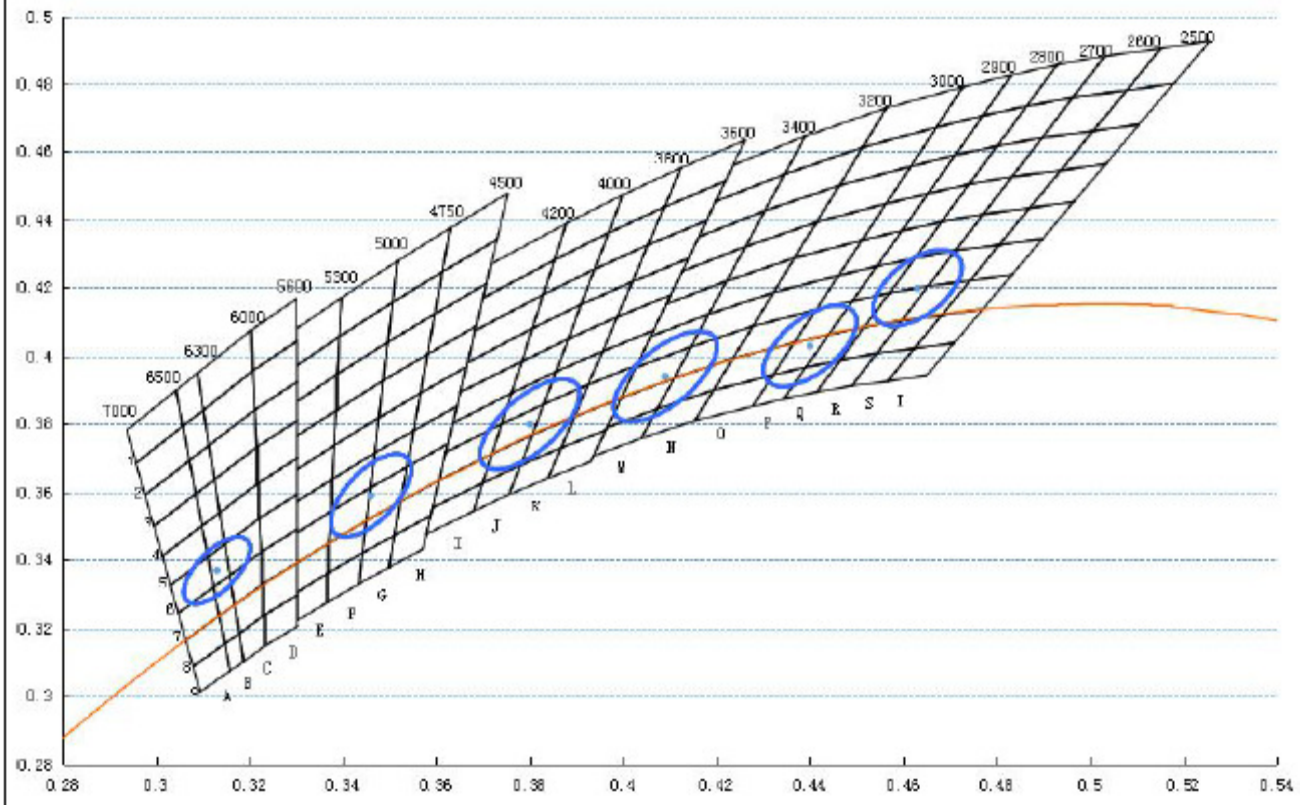
参数 Parameter	符号 Symbol	条件 Condition	显指 CRI	最小值 Min	平均值 Avg	最大值 Max	单位 Units
正向电压 Voltage	VF	IF=3000mA	/	30	-	34	V
光通量 Luminous flux	Φ	CCT:6000-6500	80				
		CCT:4000-4500	80				
		CCT:3000-3200	80				
反向漏电流 Reverse Current		VR=50V	-	-	-	5	uA

极限参数(Absolute Maximum Rating At Ta=25℃)

参数 parameter	符号 Symbol	数值 Value	单位 Units
反向电压 Reverse voltage	VR	50	V
正向电流 Continuous Forward Current	IF	3000	mA
储存温度 Storage Temperature Range	TSTG	-30 TO +60	℃
工作温度 Operating Temperature Range	TOPR	-30 TO +85	℃
手工焊接温度 Manual Soldering Temperature	TSLD	350℃ for 3sec	℃
功耗 Power Dissipation	PD	100	W
峰值正向电流 Pulsed Forward Current	IFP	3000	mA
静电承受极限 ESD Sensitivity	ESD	2000	V

100W-FL COB CW

色区参考图 The color map for reference



中心色温 CCT	2700K	3000K	3500K	4000K	5000K	6500K
X	0. 463	0. 44	0. 409	0. 38	0. 346	0. 313
Y	0. 42	0. 403	0. 394	0. 38	0. 359	0. 337

备注/Postscript:

正向电压允许误差± 3%. Tolerance of measurement of Vf is ±3%..

光通量允许误差±5%. Luminous Intensity Measurement allowance is ±5%

色温误差范围±100k. Colour Temperature Measurement allowance is ±100k

显色指数允许误差±1. Color Rendering Index Measurement allowance is ±1

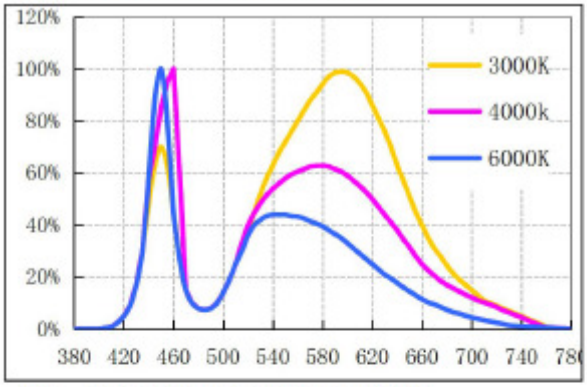
参数仅为灯珠测试数据,应用于成品后会有变化.Parameter is base on tesbing light source only, after finished on assembly will be changed

100W-FL COB CW

典型特性曲线/Typical Characteristic Curves

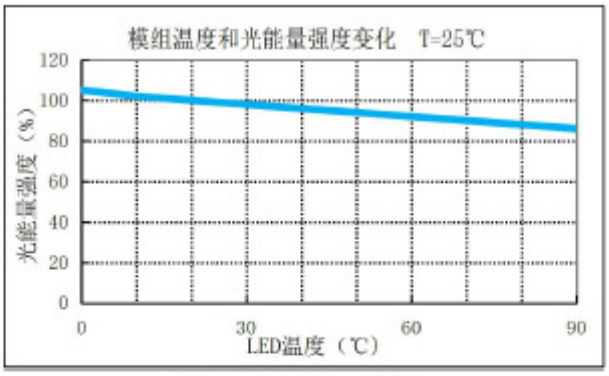
（1）.典型光谱分布

Typical spectral distribution



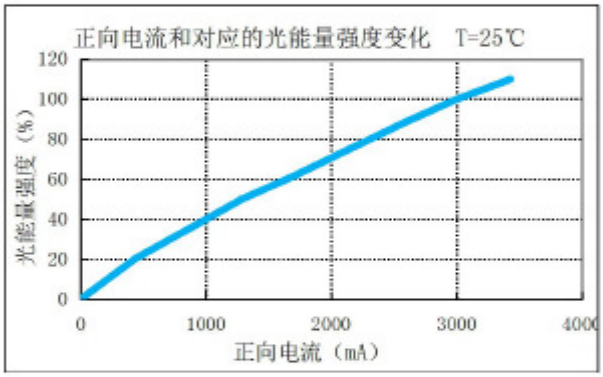
（2）.输出光通量与温度曲线

Relative Luminous Flux & Temperature



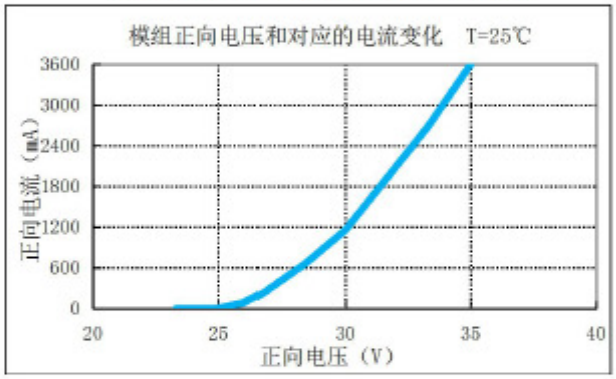
（3）.正向电流与相对光通量曲线图

Forward Current & Relative Luminous Flux Curve

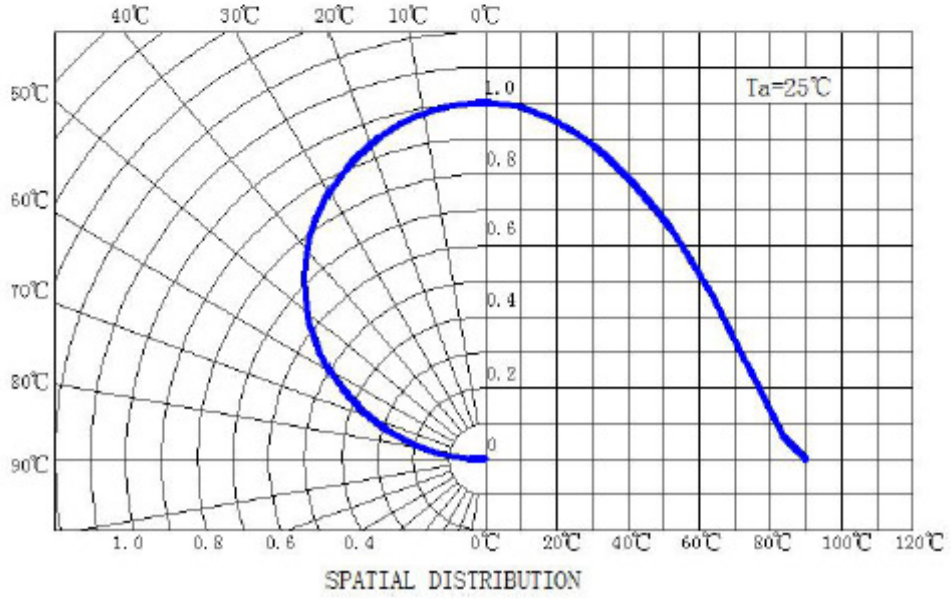


（4）.电性特征曲线图

Electrical Characteristics Curve



（5）光通量分布图 Luminous flux distribution map



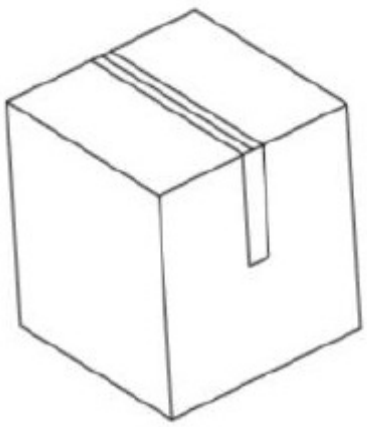
100W-FL COB CW

可靠性测试 Reliability test

项目 Test Items	测试条件 Test Condition	时间 Time	数量 Quantity	接收/拒收 Ac/Re
常温通电 Life Test	Ta=25℃±5℃ IF=3000mA	1000Hrs.	22Pcs.	0/1
温度循环 Temperature Cycle	100℃±5℃ 30 min. ↑ ↓5 min -40℃±5℃ 30 min.	100 Cycles.	22Pcs.	0/1
高温操作 High Temperature Operation	Temp:85℃±5℃ IF=3000mA	1000Hrs.	22Pcs.	0/1
低温操作 Low Temperature Operation	Temp:-40℃±5℃ IF=3000mA	1000Hrs.	22Pcs.	0/1
高温高湿通电 High Temperature High Humidity Life Test	85℃±5℃/ 85%RH IF=3000mA	1000Hrs.	22Pcs.	0/1

包装规格 Packing Specifications

产品按照规定方向放置在吸塑盒凹槽里面，上面盖上透明的塑料防护盖子，避免产品胶面受到外力挤压；每盘吸塑盒放置的标准数量根据支架规格区分为 5-15PCS 不等，如图所示，包装好的材料放置在纸箱中用透明胶带封好。The product is placed in the groove of the plastic box according to the specified direction, and the transparent plastic cover cover is covered to avoid the extrusion of the adhesive surface of the product. The standard quantity of each suction box is divided into 5-15PCS according to the specifications of the bracket. As shown in the picture, the packed material is placed in the carton with transparent adhesive tape.



100W-FL COB CW

产品注意事项：Notice of product

产品运输 Product transportation

适用范围：所有产品；

Scope of application: all products;

LED 产品在运输过程中，需保持正面朝上，防潮防水，运输过程中避免挤压、碰撞和剧烈震动。

LED products should be kept upside down, moisture-proof and waterproof during transportation and avoid extrusion, collision and severe vibration during transportation.

产品储存及期限 Product storage and time limit

室温密封存储：20℃～40℃，40%～60%RH；

Sealed storage at room temperature: 20 ~ 40 C, 40% ~ 60%RH;

防潮密封存储：20℃～30℃，25～60%RH；

Moisture proof sealed storage: 20 ~ 30 C, 25 ~ 60%RH;

产品拆包开封后，建议 24 小时内使用完成，环境条件温度<30℃，湿度<60%)。

After the product is unpacked, it is recommended that it be completed within 24 hours (ambient temperature <30, <60%).

除湿处理 Dehumidification treatment

LED 产品超出以上规定期限，或者由于其他原因受潮，建议客户做除湿处理后再使用。

LED products exceed the prescribed time limit, or because of other reasons, it is recommended that customers do dehumidification treatment before use.

除湿方法： 70℃/22±2 小时。

Dehumidification method: 70 /22 + 2 hours.

驱动电源配置 Drive power supply configuration

LED 产品在使用前，需根据使用 LED 光源产品额定电流电压合理配置恒流恒压驱动电源。建议使用驱动电源空载电压不高于 LED 光源负载电压 1.2 倍。Before using the LED products, the constant current and constant voltage drive power shall be reasonably configured according to the rated current and voltage of the LED light source. Suggested use of drive

The no load voltage of the power supply is not higher than that of the LED light source, and the load voltage is 1.2 times.

100W-FL COB CW

结温极限及散热处理 Junction temperature limit and heat dissipation treatment

LED 产品在使用过程中，请保证必要的散热设计（负极焊点温度≤85℃），且 LED 散热面需均匀涂抹散热硅脂，并紧密贴合散热器件，如散热不足，LED 内部结温超过 125℃，将降低光效及影响 LED 的使用寿命。

During the use of LED products, please ensure the necessary heat dissipation design (Negative Solder Joint Temperature < 85 ℃), and LED heat sink should be evenly smeared.

Silicone grease and tightly fit heat dissipating devices, such as insufficient heat dissipation, LED internal junction temperature exceeding 125 degrees, will reduce the light efficiency and affect the life of LED.

静电防护 Electrostatic protection

LED 是静电敏感器件，虽然 LED 产品具有优异的抗静电能力，但每经历一次静电释放产生的冲击，都会对 LED 造成一定程度的损坏。因而在使用 LED 产品过程中需要做好静电防护措施，例如佩戴防静电手套及防静电手环。

LED is an electrostatic sensitive device. Although the LED product has excellent antistatic ability, every time it experiences an impact caused by electrostatic discharge, it has all the effects.

It will cause a certain degree of damage to LED. Therefore, electrostatic protection measures are needed in the process of using LED products.

For example, wear anti - static gloves and anti - static ring.

手动焊接操作指引 Manual welding operation guidance

建议焊接时电烙铁在支架引脚上停留时间不超过 5 秒，如需要反复焊接时，间隔停留时间不少于 2 秒，避免长时间高温对 LED 造成损伤。 焊接过程中，请勿触摸或挤压 LED 的功能区表面，避免对 LED 内部造成损伤，同时请注意避免电烙铁对 LED 表面胶体的烫伤及其它损伤。

It is recommended that the solder iron stay on the support pin when welding is less than 5 seconds, and if the welding is repeated, the interval residence time is not less than 2 seconds.

Avoid long time high temperature damage to LED. During welding, do not touch or squeeze the surface of the functional area of LED to avoid internal LED.

It is also important to avoid the scalding and other injuries caused by electric iron on the surface of LED.

其它 Other

使用的 LED 矩阵驱动器，要确保反向电压不会超过最大额定值，LED 的光输出强度足以让人的眼产生不适，必须采取预防措施，以保障直视 LED 不超过几秒钟。发现产品缺陷后，用户应告知我们，不得自行对 LED 解剖和分析等的反向工艺。

The LED matrix driver is used to ensure that the reverse voltage does not exceed the maximum rated value. The intensity of the LED output is enough to cause eye problems.

Appropriate precautions must be taken to ensure that direct LED is not more than a few seconds.

After finding the product defect, the user should inform us that we should not do it ourselves. LED anatomy and analysis and other reverse processes.