

1W 系列 850nm 产品规格书

1W series 850nm product specifications

客户签字栏 CUSTOMER SIGNATURES			本公司签字栏 COMPANY SIGNATURES		
核准 APPROVED	审核 AUDIT	承认 COMFIRM	核准 APPROVED	审核 AUDIT	制作 ISSUER

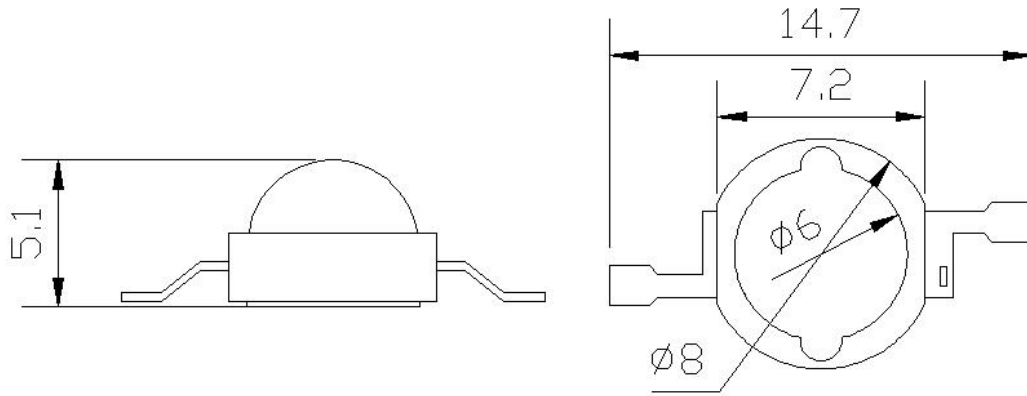
(致客户：在您承认合格后，请回传一份给我方，谢谢合作！)

TO CUSTOMER: IF YOU COMFIRM QUALIFIED,PLEASE SIGN BACK TO US,

TKS!



- 外形尺寸 Outline Dimensions



- 应用方向 Applications

- 1, 安防监控 Security Monitoring
- 2, 夜视摄像头 Night vision camera

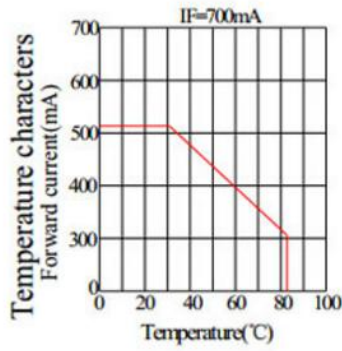
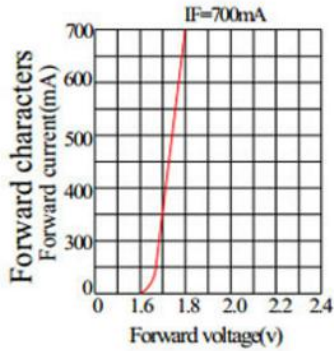
● 绝对最大额定值 Ta=25°C条件下 Absolute Maximum Rating @ Ta=25° C

项目 Parameter	符号 Symbol	最大限度值 Maximum Rating	单位 Unit
顺向电流 Continuous Forward Current	IF	700	mA
反向电压 Reverse Current	VR	5	V
工作温度 Operating Temperature Range	Topr	-20~+60	°C
储存温度 Storage Temperature Range	Tstg	-30~+80	°C

● 电特性 Ta=25°C条件下 Electrical / Optical Characteristic @ Ta=25° C

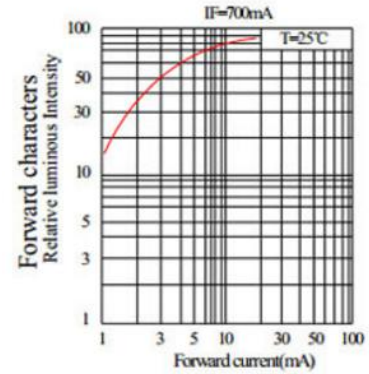
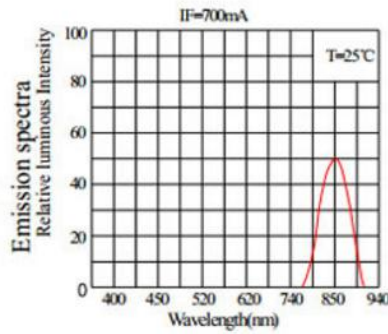
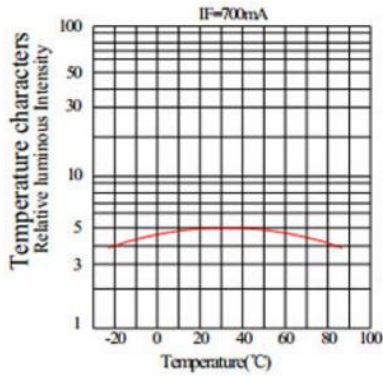
项目 Parameter	符号 Symbol	测试条件 Test Condition	最小值 min	平均值 Typ.	最大值 Max	单位 Unit
顺向电压 Forward Voltage	VF	IF=350mA	1.6		2.0	V
漏电 Reverse Current	IR	VR=5V			5	μA
峰值波长 Wavelength	λP	IF=350mA		850		nm
发光角度 Viewing Angle	θ/2	IF=350mA		140		Deg
光通量 Luminous Flux	ΦV	IF=350mA	120		200	mW

Typical electrical-optical Characteristics curves

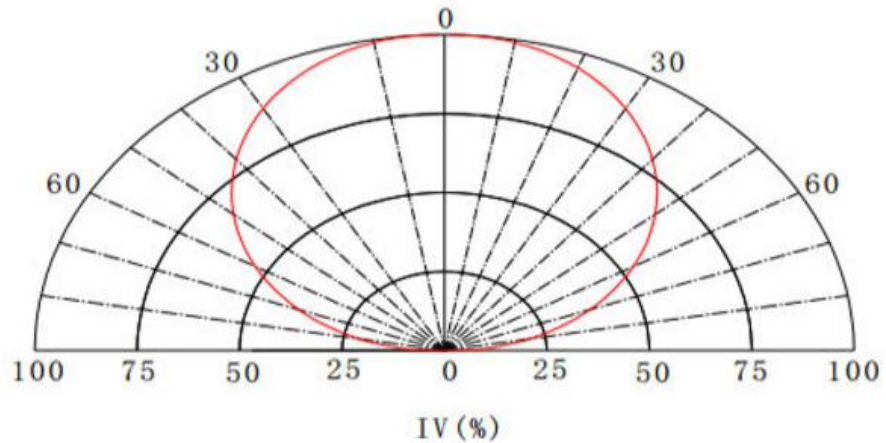


Notes:

The data are an typical presentation of the product, Contact customer service for details of technical information and warranty.
 The product is sensitive to static antistatic operation environment is recommended
 Products are shipped in either bulk bag package or taping.



Spatial Distribution



● **使用注意事项 Cautions**

1, 静电防护 Static Protection

LED 为静电敏感器件，在接触 LED 之前请确保做好防护措施，包括人体及设备，建议在使用 LED 时佩戴防静电手腕或防静电手套，设备和机器接地，防止静电积累。

The LED is an electrostatic sensitive device. Before touching the LED, ensure that the protective measures are taken, including the human body and equipment. We recommend that you wear an ESD-preventive wrist strap or ESD-preventive gloves while grounding the LED and the equipment and the machine to prevent static electricity from accumulating.

2, 散热 Heat dissipation (Heat Generation)

散热是大功率 LED 在使用时必须考虑的问题，在正确电流使用下，灯具设计的原则（考虑灯具散热能力，环境温度等）应使 LED 芯片温度在正常使用时<90 度。Heat dissipation is a problem that must be considered when using high-power LED. When using the correct current, the principle of lamp design (considering the ability of the lamp to dissipate heat, the ambient temperature, etc.) should make the temperature of the LED chip <90 degrees under normal use.

3, 焊接 Soldering(welding)

普通 PC 罩 LED 不适合回流焊焊接，较适合的焊接方法有两种：

Ordinary PC cover LED is not suitable for reflow soldering, the more suitable welding methods are two:

- 1) 手工烙铁锡线焊接，焊接温度<350°C,焊接时间<3S。Hand soldering iron tin wire welding, welding temperature <350 °C, welding time <3S.
- 2) 手工热板锡膏焊接，建议采用低温锡膏(熔点 140°C)作业，焊接温度<170°C，焊接时间<10S。Manual hot plate solder paste welding, it is recommended to use low temperature solder paste (melting point 140 °C) operation, welding temperature <170 °C, welding time <10S.

耐高温 PC 罩 LED 可回流焊作业，建议采用低温锡膏（熔点 140°C），温度设置参考如下：High temperature PC LED can be reflowed homework, it is recommended to use low temperature solder paste (melting point 140 °C), the temperature settings refer to the following:

回流焊低温焊接温度曲线图

序号	一区	二区	三区	四区	五区	六区	七区	八区	冷却区
上八温度	120	125	130	135	140	145	155	170	
下八温度	125	130	135	140	145	155	165	185	
速度	850ms/转或更具焊接状况调节，控制在4-5分钟。								

因锡膏的不同，焊接效果可能会有差异，可适当调整温度，但建议不超过 195°C，因高温对 LED 会产生较大的影响，故焊接温度越低越好。Due to the different solder paste, the welding effect may be different, may be appropriate to adjust the temperature, but it is recommended not to exceed 195 °C, because of the high temperature LED will have a greater impact, so the lower the soldering temperature the better.

4, 防化学反应 Anti-chemical reaction

LED 所使用原材料硅胶为高透湿透氧物质，所以需要防止有害物质渗透到 LED 内部引起化学或物理变化。LED 应保存于温度 30 度以下湿度 40%RH-60%RH,避免处于酸性 (PH<7) 环境中。对于原物料应让厂家提供 MSDS 报告，确认材料是否安全。根据报告确认是否含有以下对 LED 有害物质，含硫 (PCB 材料、橡胶手套、橡皮筋等材料中均含硫)，卤素类物质 (如玻璃胶、劣质树脂胶等)。LED 与含硫，含卤物质接触或处于酸性环境下，极易造成银层腐蚀、硅胶、荧光粉物质性能发生变异，从而导致 LED 失效。

The raw materials used by LED silica gel for the high permeability of oxygen-permeable material, it is necessary to prevent the penetration of harmful substances inside the LED caused by chemical or physical changes. The LED should be stored at a humidity of 40% RH-60% RH at a temperature of 30 ° C to avoid being acidic (pH <7). For raw materials should allow manufacturers to provide MSDS reports to confirm the material is safe. According to the report to confirm whether it contains the following on the LED harmful substances, sulfur (PCB materials, rubber gloves, rubber bands and other materials are sulfur), halogen substances (such as glass glue, inferior resin glue, etc.). LED and sulfur, halogen-containing substances in contact with or in an acidic environment, can easily lead to corrosion of silver, silica, phosphor material properties of variation, resulting in LED failure.

5, 正负极确认 **Positive and negative confirmation**

LED 为单向导通器件，使用时请注意方向正确，否则可能造成 LED 烧毁。

LED is a one-way conduction device, please pay attention to the correct direction of use, otherwise it may cause LED burn.

6, 驱动方式 **Drive mode**

应采用恒流驱动方式，因采用恒压驱动，微小的电压变化会引起电流骤变，LED 可能会因电流过大而烧毁。Constant current drive mode should be used, due to the use of constant voltage drive, small voltage changes can cause sudden changes in current, LED may be due to excessive current and burned.

7, 装配 **Assembly**

在装配灯具过程中应避免外力挤压、扭动 LED 透镜部位，特别对于需要配二次透镜的产品更应注意此问题，当有外力作用于灯体时可能造成内部金线断裂而导致死灯。In the process of assembly of lamps and lanterns should avoid external pressure squeeze, twist LED lens parts, especially for products with secondary lenses should pay more attention to this issue, when there is an external force on the lamp body may cause the internal gold wire fracture led to dead lights .

8, 防潮 **Moisture resistance**

LED 会有一定的吸潮现象，经高温后产生死灯现象，开封后请在当天内使用完，否则应放置于防潮柜内。超过 2 天时间未使用的 LED 应采取除湿处理，建议 100°C 烘烤 6H 以上方可使用。LED will have a certain moisture absorption phenomenon, the phenomenon of dead lights after high temperature, after opening in the day after use, or should be placed in moisture-proof cabinets. More than 2 days unused LED dehumidification should be taken, it is recommended to bake 6H above 100 °C before use.



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