



SPECIFICATION

产 品 规 格 书

CUSTOMER(客 户): _____

PART NO(产品型号): **F5-W**

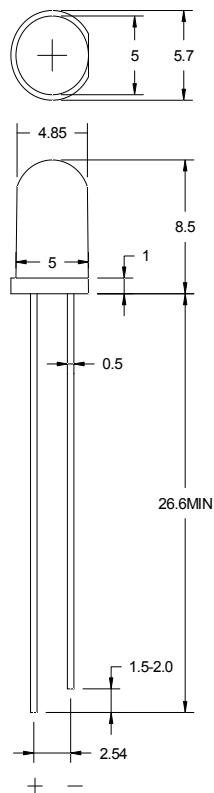
DESCRIPTION(产品描述): **R- ϕ 5 圆头长脚白光LED**

LOT NO.(规格书编号): **3041001000073**

ISSUE DATE(发行日期): **2020-10-19**

| CUSTOMER APPROED(客户确认) | | | | | |
|------------------------|-------------------|---------------------------|------------------------|------------------------------|---------------------------|
| LOT NO. (规格书编号) | PART NO (产品型号) | Color Temperature (色温) | Luminous Flux (光通量) | Luminous Intensity (发光强度) | Forward Voltage (正向电压) |
| | | | | | |

■Package Dimensions(外观尺寸).



Notes(备注):

1. All Dimensions are in millimeters(所有尺寸以毫米为单位).
2. Tolerance is ± 0.25 unless otherwise noted(未标注公差为: ± 0.25).

■Feature(特性).

1. Adopt high heat conduction material and stable chip(采用高导热材料,高稳定性芯片).
2. Standard structure, easy to assemble(外观结构通用,便于安装).
3. High brightness effect,low attenuation, long lifespan(高亮度,高光效,衰减小,使用寿命长).



■Electrical/Optical Characteristics(At Ta=25°C) (光电参数).

| Part No (产品型号) | Test Conditions (测试条件) | Color Temperature (色 温) | Luminous Intensity (发光亮度) | Forward Voltage (正向电压) | 50%Power Angle (半功率角) | Reverse Current (反向漏电流) |
|-------------------|------------------------------|----------------------------|---------------------------------|------------------------------|-----------------------------|-------------------------------|
| XGB-W-5043W-01 | I _F =20 mA | 6000-10000 k | ≥10000 mcd | 3.0-3.4 V | 15 度 | 0-5 uA |

Notes(备注):

1. Tolerance of measurement of forward voltage±0.1V(测量正向电压的公差±0.1v).
2. Tolerance of measurement of Luminous Flux ±10%(测量光通量的公差±10%).
3. Tolerance of measurement of Luminous Intensity ±15%(测量发光强度的公差±15%).

■Absolute Maximum Rating(At Ta=25°C) (极限参数).

| Parameter (参数) | Symbol (符号) | Absolute maximum Rating (极限参数) | Units (单位) |
|--|-----------------------|-------------------------------------|---------------|
| Power Dissipation (功率) | P _D | 60 | mW |
| Continuous Forward Current (正向输入电流) | I _F | 20 | mA |
| Peak Forward Current (顺向脉冲电流) | I _F (Peak) | 30 | mA |
| LED Junction Temperature (结点温度) | T _J | ≤115℃ | ℃ |
| Reverse Voltage (反向电压) | V _R | ≤5V | V |
| Operating Temperature Range (工作温度范围) | T _{OPR} | -25 To +80 | ℃ |
| Storage Temperature Range (存储温度范围) | T _{STG} | 0~40 | ℃ |
| ESD Sensitivity (抗静电能力) | ESD | 2000(HBM) | V |
| Manual Soldering Temperature (手动焊接温度) | T _{SOL} | 260±10℃ For 3 Seconds (260±10℃/3 秒) | |

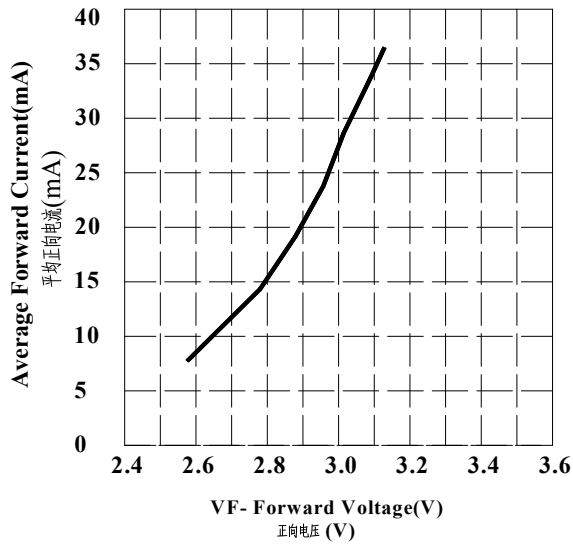
Notes(备注):

1. Absolute maximum ratings Ta=25℃(极限参数的环境温度: 25℃).
2. 1/10 Duty Cycle 0.1ms Pulse Width.(脉冲宽度0.1ms，占空比1/10).



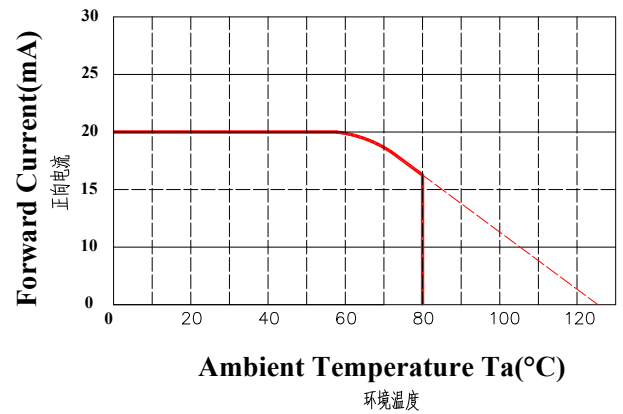
Forward current-Forward Voltage

(正向电流-电压曲线图)

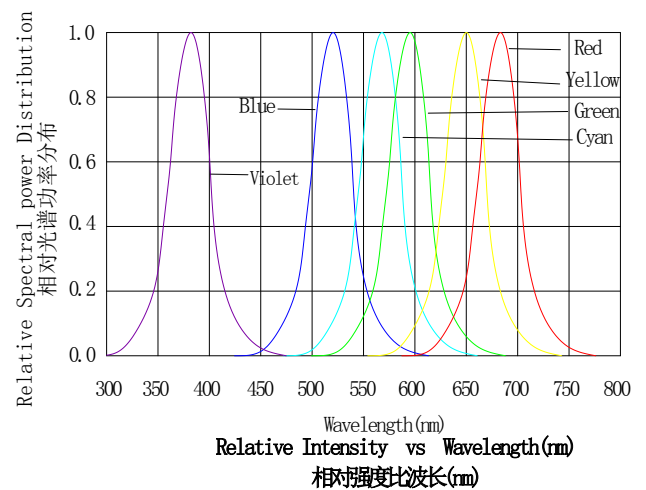
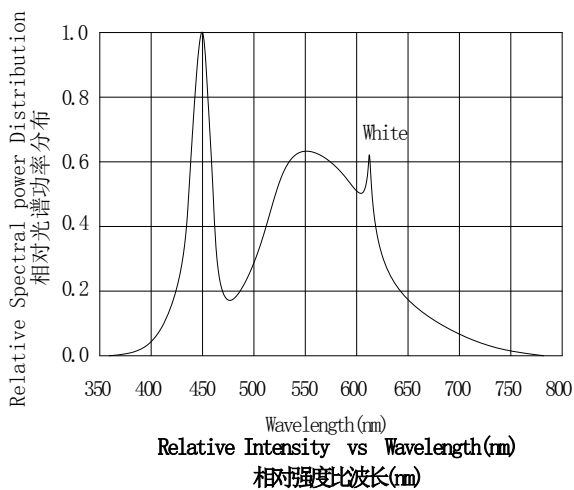


Forward current- Ambient Temperature

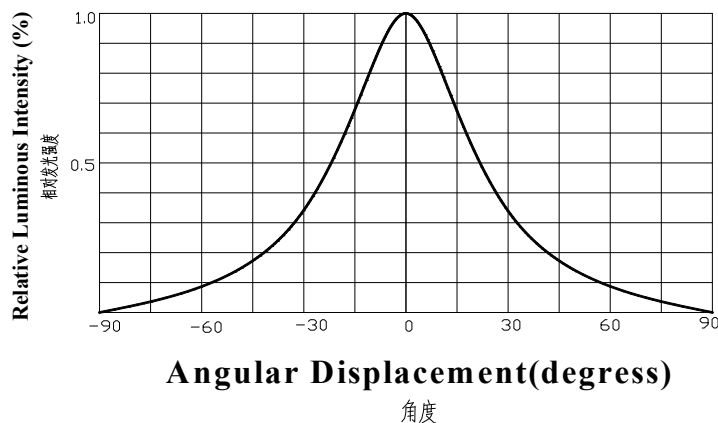
(正向电流-温度曲线图)



Spectrum Distribution(光谱分析图)



Radiation Diagram(辐射图)





Recommend the use of environmentally friendly Lead-free Solder(建议使用对环境无害的无铅焊料).

CAUTIONS(注意事项) :

1. After open the package, the LED should be kept at 25°C, 65%RH environment or less.
打开包装后请在温度25±5°C, 湿度65±5%的环境下使用.
2. The LED should be soldered within 48 hours (2days) after opening the package.
打开包装后请在48小时内焊接.
3. The LAMP LED is an ESD sensitive device. All the equipment and machine must be properly grounded.
LED是静电敏感器件, 使用时所有设备、机构都需有适当的接地导电措施.
4. When make use of it, please use static-free container, operator should wear antistatic clothes and rope-static-ring also should make effective ground.
使用时请使用防静电的盛装容器, 作业员应穿着防静电服装及佩戴有绳之静电环并作有效接地.
5. Damaged device will appear some symptoms, lower forward voltage, higher leak current, or even short circuit.
受静电与突波破坏之LED的电性特性上, 会有明显的漏电流, 或驱动电压明显变低, 甚至是短路现象.
6. It's unsuitable for circumfluence soldering.
本产品不适合作回流焊接.
7. Ferrochromium soldering: power keep no more than 40W, tip temperature should not pass 280°C, soldering time within 3 second, welding position and lens should keep 1.6mm distance at least.
烙铁焊接时烙铁功率不要超过40W, 尖端温度不要超过280°C, 焊接时间不要超过3秒, 焊接位置最少与胶体保持1.6mm距离.
8. Wave-soldering: temperature should not pass 265°C, soldering time within 5 second, welding position and lens should keep 1.6mm distance at least.
波峰焊接时温度不超过265°C, 焊接时间不要超过5秒, 焊接位置最少与胶体保持1.6mm距离.
9. After soldering the LED should keep out off any shake or outer force before it come to normal temperature.
在焊接温度回到正常以前, 必须避免使LED受到任何震动或外力.
10. When shape pin should used tong or by professional staff, keep 2mm at least between lens and bend pin, the pin should be shaped before soldering
引脚成形必须使用夹具或由专业人员来完成, 离胶体最少2mm才能弯折引脚, 请在焊接前完成引脚成形.
11. The pin can't not be press in high temperature, cut pin in room temperature because in high temperature LED may fail.
高温时, 不可对引脚施压, 请在室温时裁切引脚, 高温时裁切可能会造成LED失效.
12. after shape, pin space should keep in line with the PCB board space.
引脚成形后必须保证引脚间距和线路板上一致.
13. LED is one-way continuity, please check electrode before mount, if amount wrong, the LED chip will damage or fail when LED applied voltage.
LED单向导通性, 安装前确认极性, 若装反, 在施加电压时容易造成LED晶片损伤或失效.
14. Ordinary our LED the long pin is anode, short pin is cathode, lens without gap is anode, with gap is cathode unless other special require and note.
通常在没有特别要求或指示下, 我们提供的LAMP LED的长脚为正极, 短脚为负极, 胶体无缺口的一端为正极, 有缺口的一端为负极.
15. Please design the PCB board to keep a distance between LED and other emit heat component.
线路设计时, 请不要将LED与发热元件靠得过近.
16. Strongly recommend design the board according setting current other than setting voltage if you are really need setting voltage type please consider there may cause influence arise by difference voltage of difference LED.
电路设计上, 建议以定电流设计, 若为定电压设计, 请考虑LED之间不同正向电压所可能造成之影响.
17. The outer voltage change will bring the current index change unsuitable design and current control easy cause LED fail for example excess current will cause LED life short or even burn down too little electricity will cause lacking light.
LED之外加电压变化, 会造成电流指数变化, 不当之设计及流控制, 易造成LED失效, 如电流过大引起寿命问题甚至烧坏, 电流小引起亮度不足.
18. If you need make difference BIN LED in the one module please confirm whether it can meet the electric and optics characteristic require such as the current balance emitting and brightness consistency.
不同BIN号之LED需安装在同一组件时, 请先确认是否可满足相关电气及光学之特性要求, 如电流是否均衡, 光色、亮度的一致性.
19. Heat Generation: Thermal design of the end product is of paramount importance. Please consider the heat generation of the LED when making the system design. The coefficient of temperature increase per input electric power is affected by the thermal resistance of the circuit board and density of LED placement on the board, as well as other components; The operating current should be decided after considering the ambient maximum temperature of LED's
产生的热量: 最终散热设计是应用产品至关重要的. 请系统设计时考虑到 LED 工作时产生的热量, 输入的电功率, 温度系数的增加, 热传导电路装置设置及其他组件. 这些都是非常必要的; 工作电流决定后, LED所能承受的最高的环境温度也应当得到保证.
20. Cleaning: It is recommended that Ethanol alcohol be used as a solvent for cleaning the LED's. when using other solvents, it should be confirmed beforehand whether the solvents will dissolve The package and the resin or not. Freon solvents should not be used to clean the LED's because of worldwide regulations.
清洗: 建议使用浓度低的乙醇酒精作为 LED 的清洗溶剂. 当使用其它溶剂时, 应当事先确认是否会对封装结构及硅胶产生危害. 依照世界各地的法则及规定, 氟利昂溶剂是不能用来清洁LED 的.