

High Power LED: 2.7X2.0mm. 940nm Infrared

(高功率 LED : 2.7X2.0mm 940nm 红外线)

Part No(部件型号) :YL-2720D(80)-940nM(500mW)



PRODUCT DESCRIPTION : (产品描述 :)

■Features: 特点 :

- High radiant intensity (高辐射强度)
- High reliability (高可靠性)
- High output power at (高输出功率)

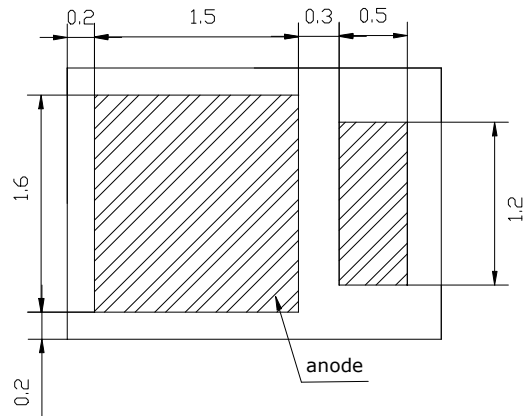
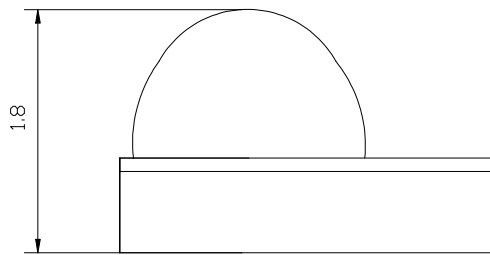
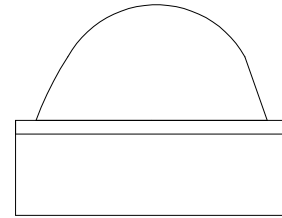
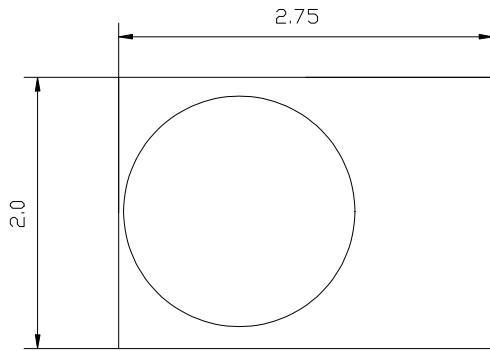
■Descriptions: 说明 :

The series is specially designed for application requiring higher brightness. (该系列产品是专门设计的应用需要更高的亮度)

■Applications: 应用范围 : ..

- Free air transmission system (自由空气传输系统)
- Infrared remote control units with high power requirement (红外遥控器的高功率要求单位)
- IR searchlight CCD lighting (CCD 的红外探照灯照明)
- night vision light source (夜视光源)
- Smoke detector Infrared applied system (烟雾探测器红外应用系统)

■ Package Dimension:



PART NO(產品型號)	Chip Material (芯片材料)	LED Emitted Color (LED 的发光颜色)	LensColor (镜片颜色)
YL-2720D(80)-940nM(500mW)	AlGaAs/Silicon Substrate	Infrared (红外线)	Water Clear (无色透明)

Notes:

1. All dimensions are in millimeters (所有尺寸以毫米為單位)
2. Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted..(未標注公差為: $\pm 0.25.$, 另有標注除外).
3. Specifications are subject to change without notice(規格若有變動, 恕不另行通知).

■ Absolute Maximum Ratings at Ta=25°C (绝对最大额定值在 Ta=25°C)

Parameter 参数	Symbol 符号	Rating (评级定额)	Unit 单位
Forward Current 正向电流	I _F	700	mA
Operating Temperature 工作温度	T _{opr}	-40 to +85	°C
Storage Temperature 储存温度	T _{stg}	-40 to +85	°C
Soldering Temperature 焊接温度	T _{sol}	220 ±5 for 5sec	°C
Power Dissipation 消耗功率	P _d	1.4	W
Peak Forward Current (Duty 1/10@1KHz) 峰值正向电流	I _{F(Peak)}	1	A
Reverse Voltage 反向电压	V _R	5	V

■ Electronic Optical Characteristics : (电子光学特性)

Parameter 参数	Symbol 符号	Min. 最小值	Typ 中间值	Max. 最大值	Unit 单位	Condition 测试条件
Radiated Output Power 辐射输出功率	P _o	/	500	/	mW	I _F =700mA
Radiated Output Power 辐射输出功率	P _o	/	200	/	mW/sr	I _F =700mA
Viewing Angle 视角	2θ 1/2	/	80	/	deg	I _F =700mA
Peak Wavelength 峰值波长	λ _p	/	940	/	nm	I _F =700mA
Spectrum Radiation Bandwidth 光谱辐射带宽	△λ	/	40	/	nm	I _F =700mA
Forward Voltage 正向电压	V _F	1.2	1.5	2.0	V	I _F =700mA
Reverse Current 反向漏电流	I _R			10 uA	V	V _R =5V

■ Typical electro-optical characteristics curves :(典型的光电特性曲线:)

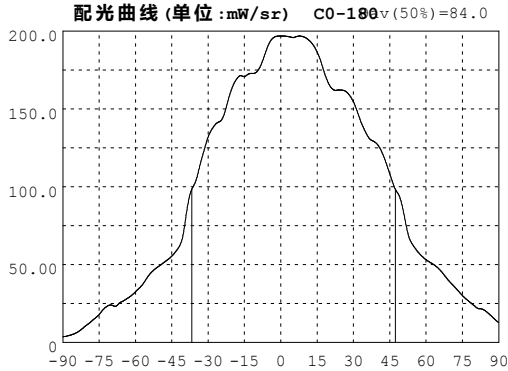
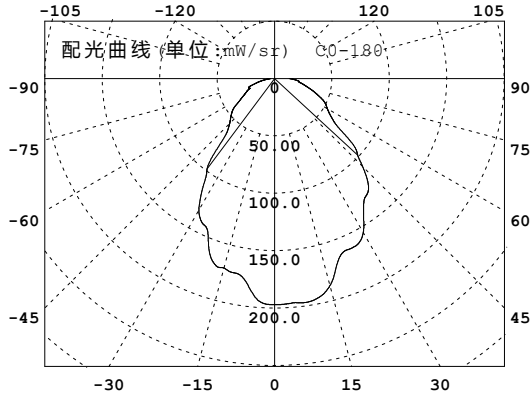


Fig 1. Forward Current vs. Forward Voltage

Fig 2. Relative Radiant Power vs. Wavelength

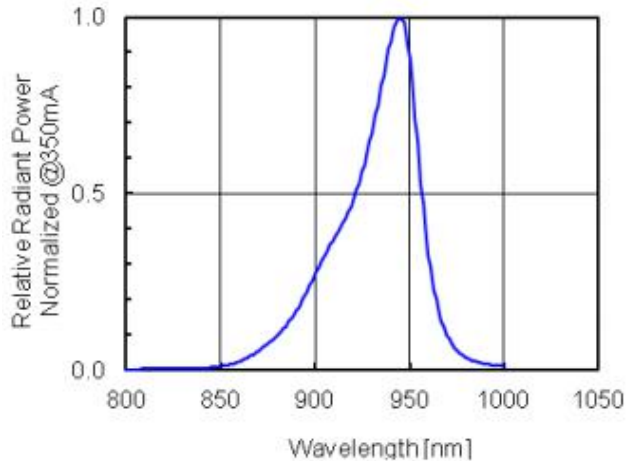
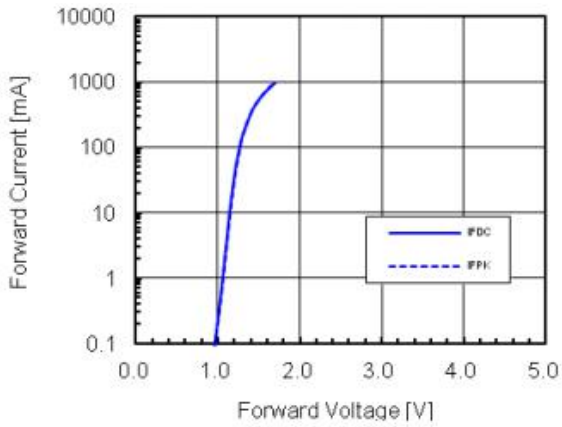


Fig 3. Relative Radiant Power vs. Forward DC Current

Fig 4. Relative Radiant Power vs. Forward Peak Current

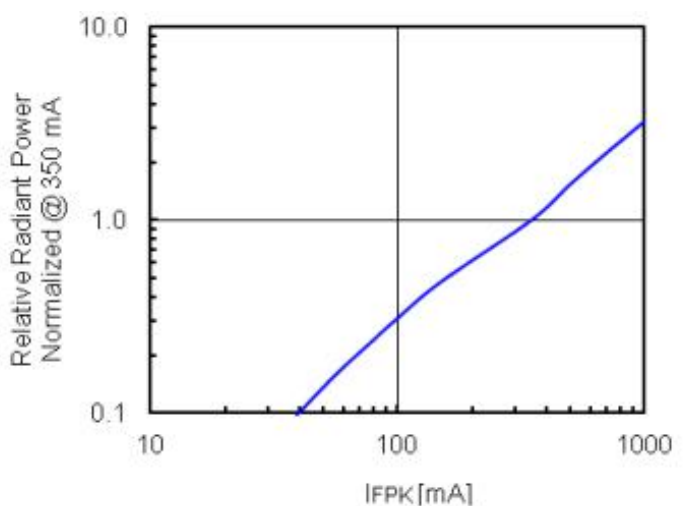
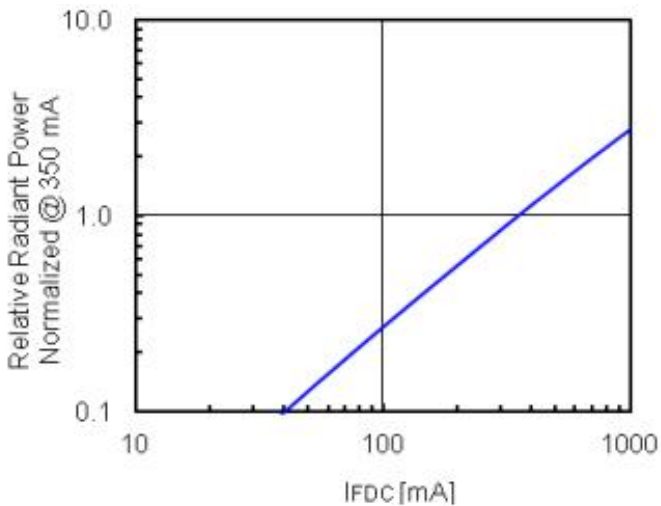


Fig 5. Forward DC Voltage vs. Temperature

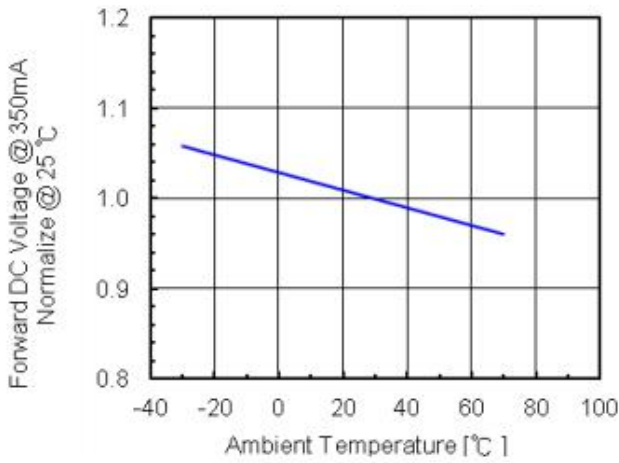
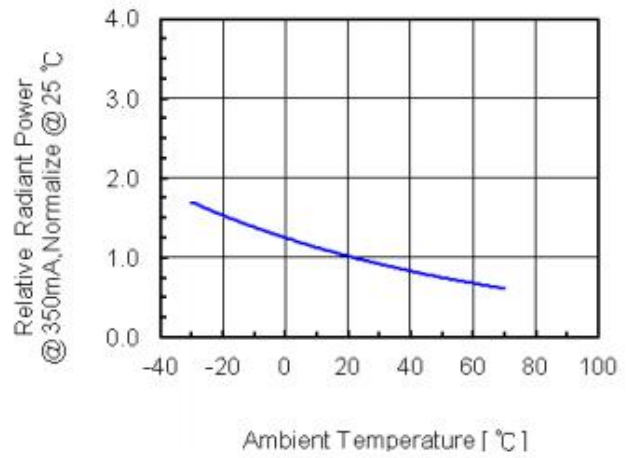
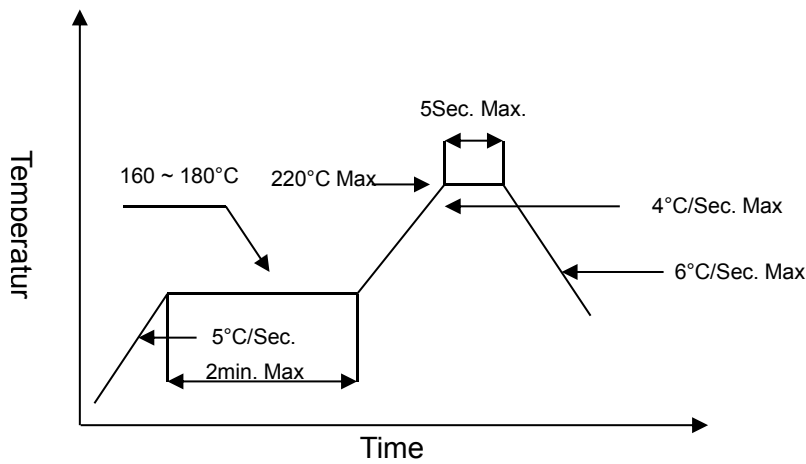


Fig 6. Relative Radiant Power vs. Temperature



■ Precautions For Use 使用注意事项

Soldering Condition: 焊接条件:



1. Reflow soldering should not be done more than two times.回流焊不可做两次以上。
2. When soldering, do not put stress on the LEDs during heating.
焊接时，在加热过程中勿对 LED 施加压力。
3. After soldering, do not warp the circuit board.焊接后，勿弯曲电路板。