

SPECIFICATION

(产品规格书)

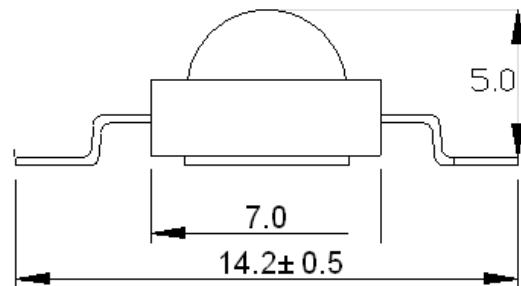
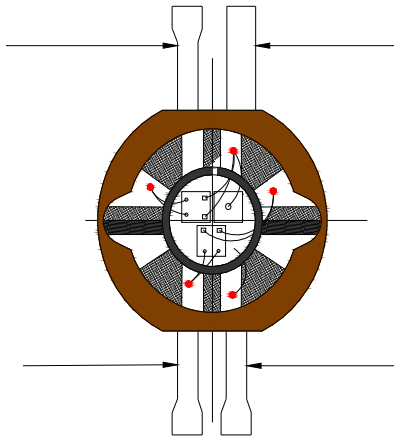
CUSTOMER : _____
(客户)
PART NO. : LY-RGB081W140D
(产品型号)
SPEC NO. : LY-LEYOND -0028
(规格书编号)
DESCRIPTION : 全彩大功率 LED
(产品描述)
DATE : 05/11/2008
(日期)

R&D DEPARTMENT (技术部)		
APPROVED (核准)	CHECKED (审核)	PREPARED (制定)

■ Feature (特性)

- ◆ High Power LED
(全彩大功率 LED)
- ◆ Package : SMT Package
(贴片式外形)
- ◆ Half Angle ($2\theta_{1/2}$):140°
(视角: 140°)
- ◆ Lens Color : Water Clear
(透镜颜色: 无色透明)

■ Package Dimensions (外观尺寸)



Notes:

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)

Part NO. (产品型号)	LED Chip		LED Emitted Color (LED 发光颜色)	Lens Color (透镜颜色)	Description (描述)
	Material (材质)	Emitted Color (发光颜色)			
LY-RGB081W140D	InGaN /GaN AlInGaP /GaP	Red(红色) Green(绿色) Blue(蓝色)	Red(红色) Green(绿色) Blue(蓝色)	Clear(透明)	Water Clear (无色透明)

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

Parameter (参数)	Symbol (符号)	Conditions (测试条件)	Color (颜色)	Min. (最小值)	Avg. (平均值)	Max. (最大值)	Units (单位)
Luminous Flux (发光强度)	Φ	I _F =350mA	R	40	--	45	lm
			G	50	--	60	
			B	10	--	15	
Dominant Wavelength (主波长)	WD	I _F =350mA	R	620	--	625	K
			G	520	--	525	
			B	460	--	465	
Forward Voltage (正向压降)	V _F	I _F =350mA	R	2.0	--	2.4	V
			G	3.2	--	3.6	
			B	3.2	--	3.6	
Thermal Resistance Junction To Board (热阻)	Rθ _{J-B}	I _F =350mA	R/G/B	--	10	--	°C/W
Reverse Current (反向漏电流)	I _R	V _R =5V	R/G/B	--	--	1	μA
Viewing Angle ^[1] (发光角度)	2θ _{1/2}	I _F =350mA	R/G/B	--	140	--	Deg

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

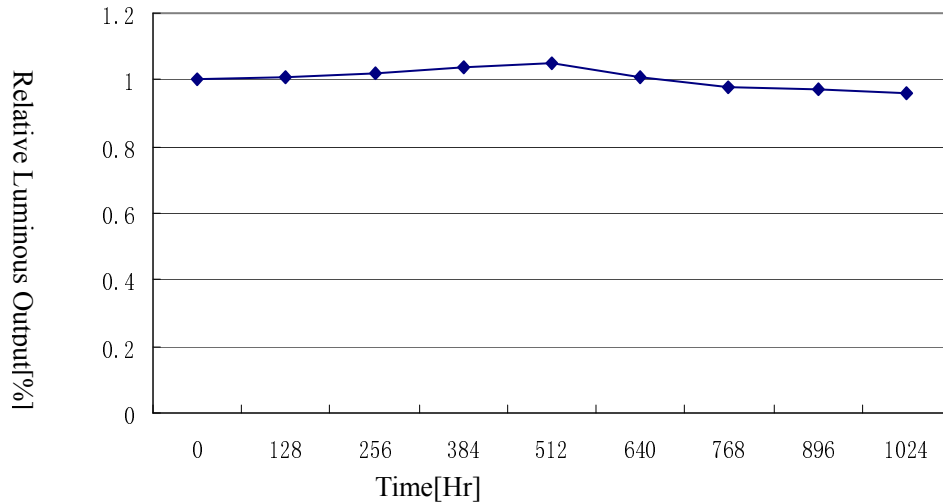
Parameter (参数)	Symbol (符号)	Ratings (数值)	Units (单位)
LED Junction Temperature (结点温度)	T _J	120	°C
Reverse Voltage (反向电压)	V _R	5	V
Operating Temperature Range (工作温度)	T _{OPR}	-30°C To +60°C	
Storage Temperature Range (储存温度)	T _{STG}	-40°C To +100°C	
Manual Soldering Temperature (手工焊接温度)	T _{SOL}	350°C± 20°C For 3~5 Seconds	
ESD Sensitivity (抗静电能力)	ESD	2000V HBM	

Room Temperature Operating Life Reliability Test Result

常温点亮信耐性结果

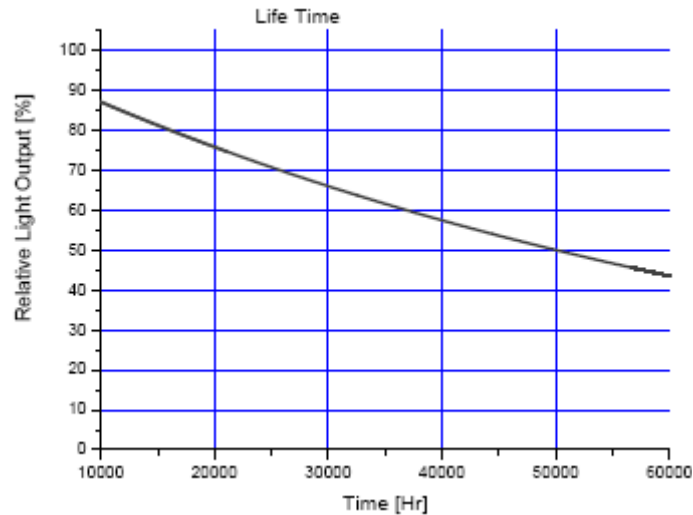
(Ta=25°C,If=350mA)Use SSC circuit board&heat sink(Tj=50°C)

使用SSC带热沉电路板(Tj=50°C)



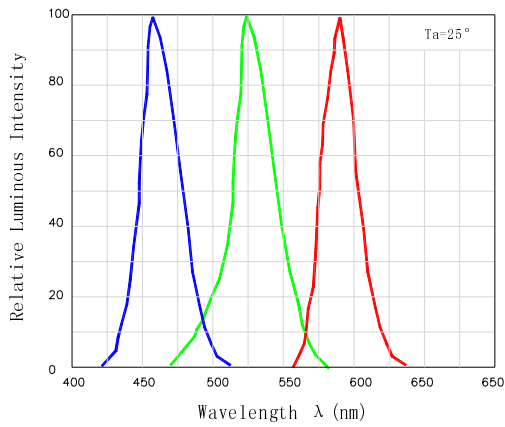
1000HR 2.5% degradation(1000 小时衰减 2.5%)

Life Time graph (使用寿命)

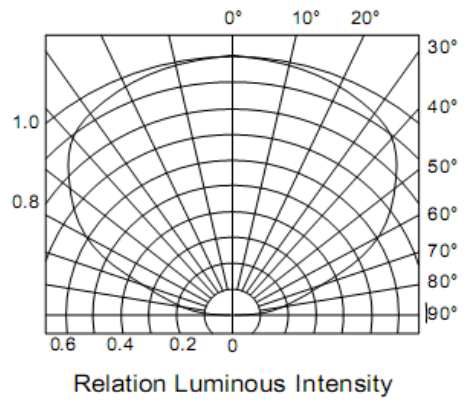


50000HR 50% degradation (50000 小时衰减 50%)

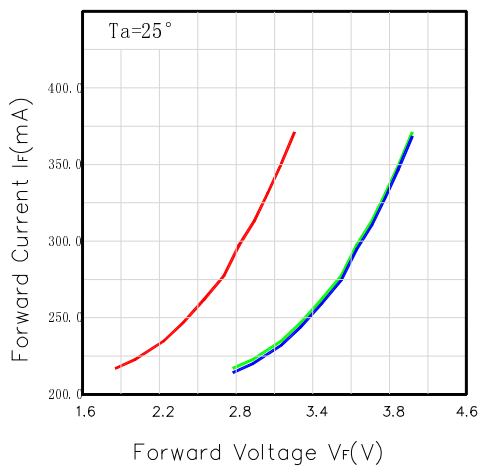
Spectrum Distribution(光谱分布图)



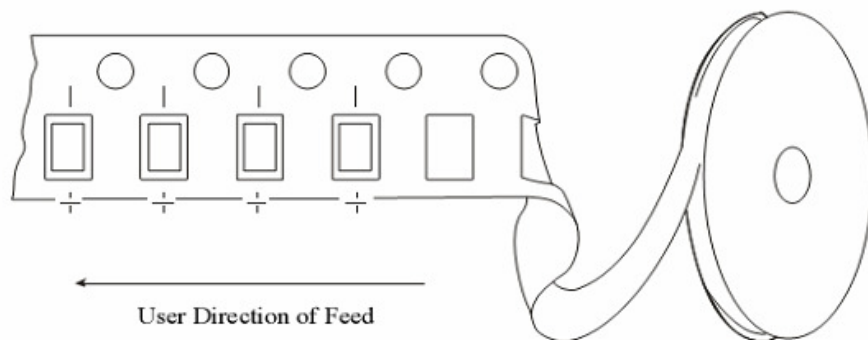
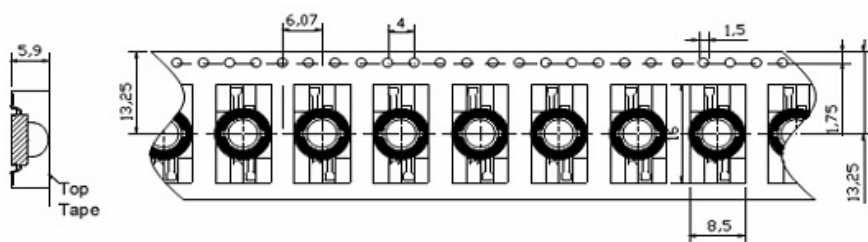
Radiation Diagram(角度图)



V_F-I_F Characteristics(V_F-I_F 曲线)



Packing Standard(包装标准)



Precautions For use

(1) Storage

In order to avoid absorption of moisture it is recommended that the products are stored in the dry box (or dessicator) with a dessicant. Alternatively the following environment is recommended:

Storage temperature :5°C~30°C Humidity:60% HR max.

- (2) Any mechanical force or any excess vibration should be avoided during the cooling process after soldering.
- (3) Components should not be mounted on distorted Printed Circuit Boards.
- (4) Devices should not be used in any type of fluid such as water,oil,organic solvents etc.
When cleaning is required,IPA should be used.
- (5) Devices should be soldered within 7 days after opening the moisture-proof packing.
- (6) ESD Precautions.Static Electricity and surge damages LEDs.
It is recommended that wrist bands or anti-electrostatic gloves be used when handing the LEDs.All devices,equipment and machinery should be properly grounded.
- (7) It is recommended to use individual resistors when LEDs are used in parallel circuits in order to improve performance.