SPECIFICATION FOR APPROVAL

CUSTOMER NAME :

PART No. : HXGC-S3528WW

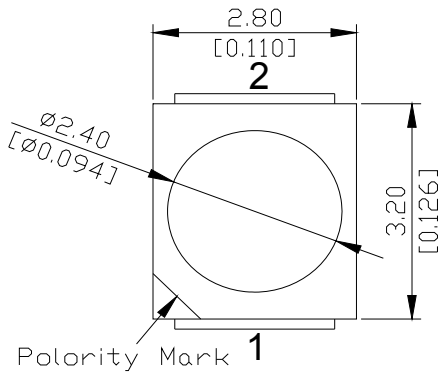
ISSUE DATE :

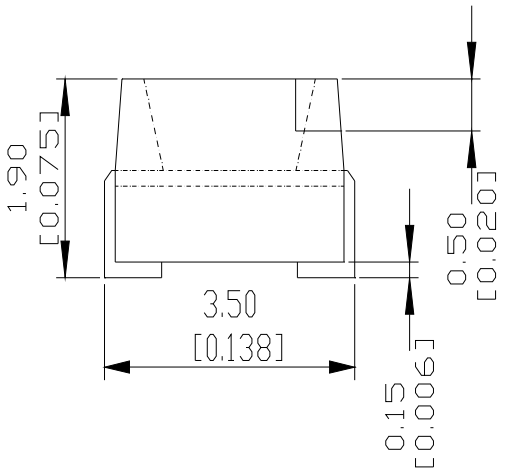
ACCESSORY :

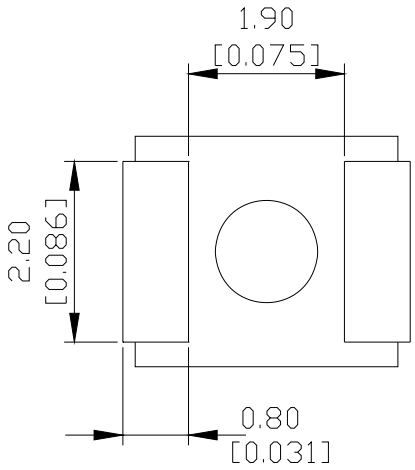
APPROVED SIGNATURES		

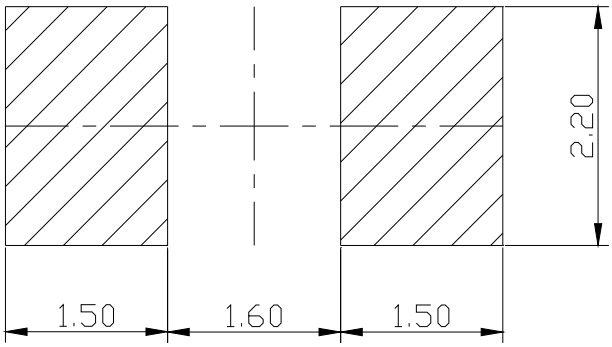
QUALITY DEPT.	ENGINEERING DEPT.	PRODUCER

■ Mechanical Dimensions:









Note:

1. All dimensions are in millimeters.
2. All dimensions without tolerances are for reference only.
3. Material as follows:

Package:	Heat-Resistant Polymer
Electrodes:	Cu Plating Copper Alloy

■Absolute Maximum Ratings (Ta = 25℃) :

Items	Symbol	Absolute maximum Rating	
		WW	Unit
Power Dissipation *	P_D	100	mW
DC Forward Current	I_F	20	mA
Peak Pulse Forward Current*	I_{FP}	100	mA
Reverse Current	I_r	10	uA
Reverse Voltage	V_R	5	V
LED Junction Temperature	T_j	105	℃
Operating Temperature	T_{op}	-30 ~ +60	℃
Storage Temperature	T_{stg}	-40 ~ +100	℃
Soldering Temperature	T_{sol}	Max.240°C for 5 sec Max (4mm from the base of the lens)	

*Pulse width≦0.1msec duty≦1/10

■ Typical Electrical & Optical Characteristics (Ta = 25℃):

Part No	Color Temperature	Forward Voltage(V)			Test Condition	Viewing Angle (Typ.)	Luminous Flux（lm）	Luminous Intensity（mcd）
		Min.	Typ.	Max.				
HXGC-S3528WW	WW(3000-3500K)	2.8	3.2	3.4	I_F = 20mA	120	6-7	1200-1500

■ Notes:

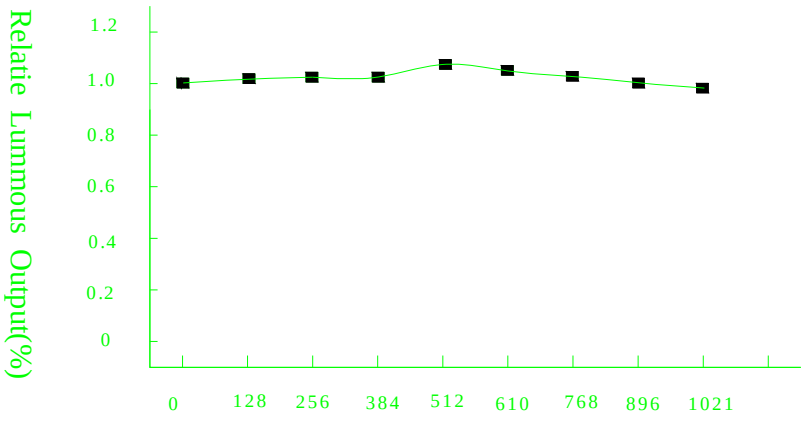
1.Absolute maximum ratings Ta=25□.

2.Tolerance of measurement of forward voltage±0.1V.

3.Tolerance of measurement of Luminous Flux ±15%.

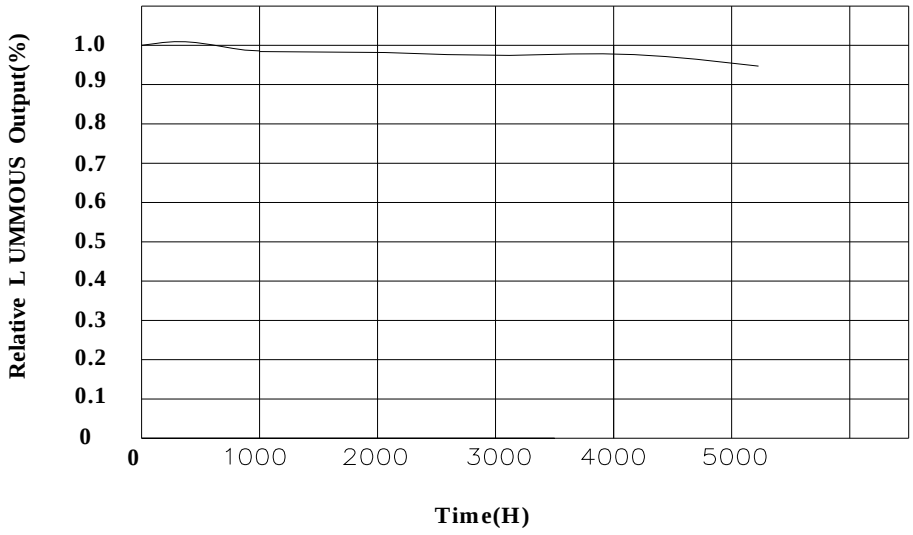
■ Room Temperture Operating Life Reliability Test Result

（Ta=25℃,If=20mA）Use SSC ciruit board&heat sink(Tj=50℃)



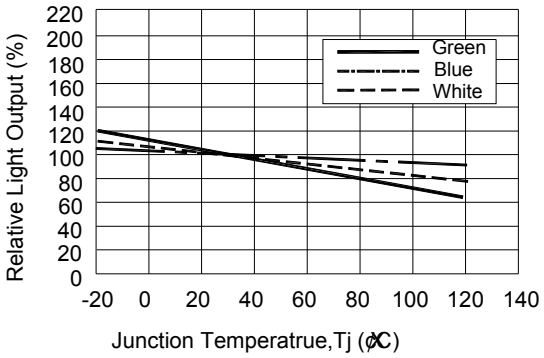
1000HR 2.5% degradation(1000小时衰减2.5%）

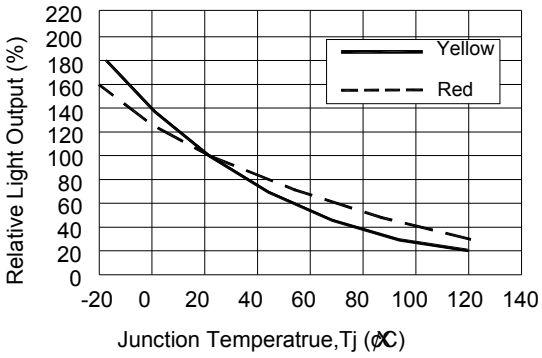
Life Time graph



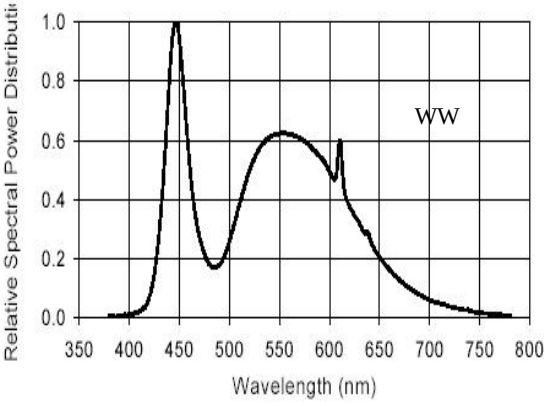
5000HR5% degradation

Light Output Characteristics

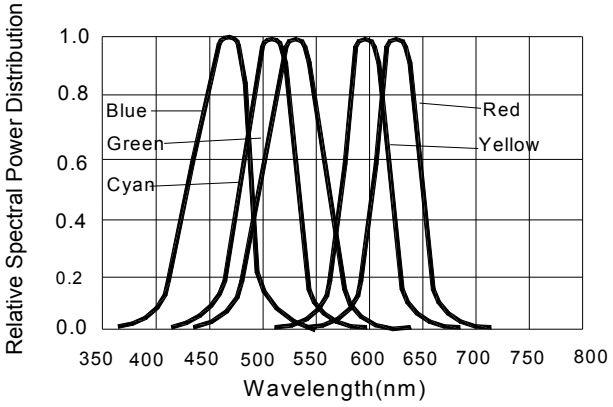




Wavelength Characteristics

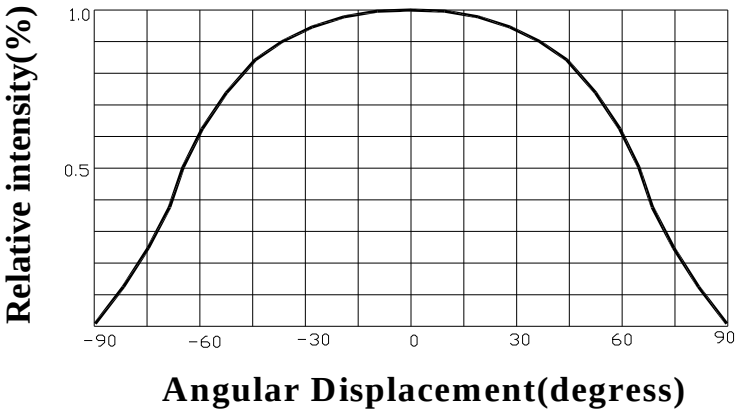


Relative Intensity vs Wavelength (nm)



Relative Intensity vs. Wavelength(nm)

Typical Representative Spatial Radiation Pattern of single LED



■Reliability

1.Test Items And Results

Classi-fication	Test Item	Reference Standard	Test Conditions	Duration	Units Tested	Number of Damaged
Operation Test	Operating Life Test		T_A=25℃±5℃，IF=20mA	1000 Hrs	22	0/22
Environment Test	High Temperature Storage	JEITA ED-4701 200 201	T_A=100℃±5℃	1000 Hrs	22	0/22
	Low Temperature Storage	JEITA ED-4701 200 201	T_A= - 40℃±5℃	1000 Hrs	22	0/22
	Temperature. & Humidity Storage		T_A=85℃±5℃，RH=85%±5%RH	1000 Hrs	22	0/22
	Thermal Shock	JEITA ED-4701 300 307	-40°±5℃ ←→+85℃±5℃ 30min dwell / 5 min transfer	50 Cycles	22	0/22
Soldering Test	Solder ability		240±5℃，5 ±1 sec	1 time Over 95%Wetting	22	0/22
	Resistance to Soldering Heat		260±5℃，10 ±1 sec	1 time	22	0/22

2. Failure criteria

- Electrical Failures:
  - V_F shift% >10%
  - IR(VR=7V)>1uA
- Visual Failures:
  - Broken or damaged package or lead
  - Solder ability < 95% Wetting
  - Dimension out of tolerance
  - Discolor of lens

■ Note：It is required that the LEDs should be attached heat-sink when these LEDs are Operating.

Precautions For use

(I) Storagre

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

Storage temperature :5℃～30℃ Humidity:60%HR max

(II) Any mechanical force or any ekcess vibration should be avoied daring the cooling process after soldering.

(III) Components should not be mounted on distorted Printed Circuit Boards.

(IV). 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 .

(V). Devices should be soldered with in 7 days after opening the moisture-proof packing.

(VI). ESD Precaution .Static Electricity and surge damages LEDs.

It is recommended that wrist bands or anti-electrostatic gloves be uses when handing the LEDs. All devices, equipment and machinery should be properly grounded.