



承认书

Specification for approval

客户名称(CUSTOMER NAME):

经办者(DIRECTOR):

料号(PART NO.): E6C1209RGBC3UDA

品名(PART NUMBER): 1209 RGB

发件日期(ISSUE DATE):

一.谨致执事者:兹提供敝公司产品之有关详细规格及图面数据,敬请给予办理测试认定手续.
同时敬请送返一份附有贵公司测试认定后的样品承认书.

We are please in sending you herewith our specification and drawings for your approval.

Please return to us one copy "For Approval" with your approved signatures.

二.附件 ACCESSORY

■样品 ■封装尺寸 ■电气特性 ■内部线路 ■焊性建议 ■包装

三.客户意见栏 CUSTOMER'S PROPOSA

AGREE 同意 (请于认可栏中签名)

DISAGREE 不同意



ATTENTION
OBSERVE
PRECAUTIONS
FOR HANDLING
ELECTROSTATIC

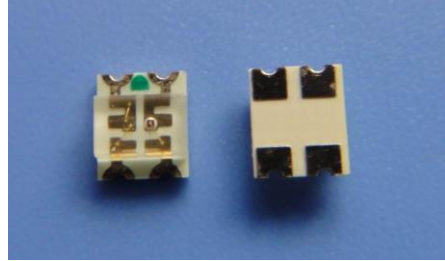
REASON 原因: _____

CUSTOMER SIGNATURE 客户认可签章: _____



Features:

- Long operating life
- Low voltage DC operated
- Pb free
- Green product, remain within RoHS



Application:

- Backlight
- Decoration lighting
- Indicator

Part Number	Dice Material	Emitted Color	Lens Color
E6C1209RGBC3UDA	InGaN/ InGaN/ AlGaInP	R/G/B	Water Clear

Electro-Optical Characteristics (Ta=25°C)

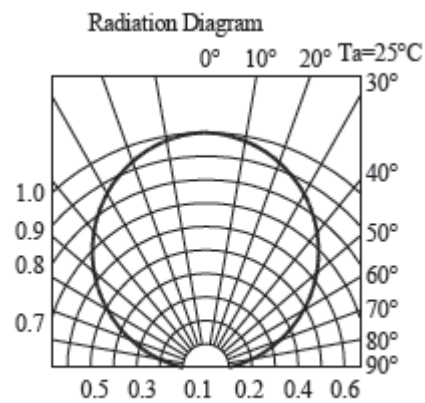
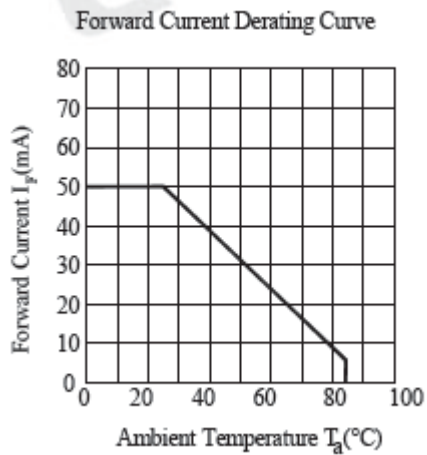
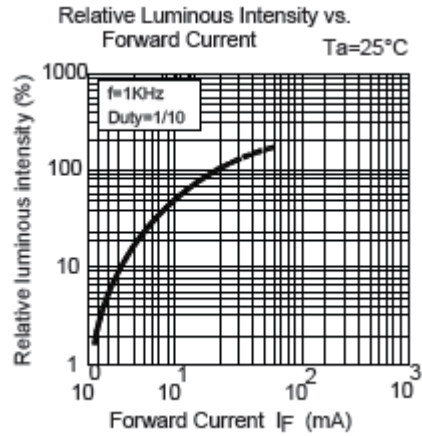
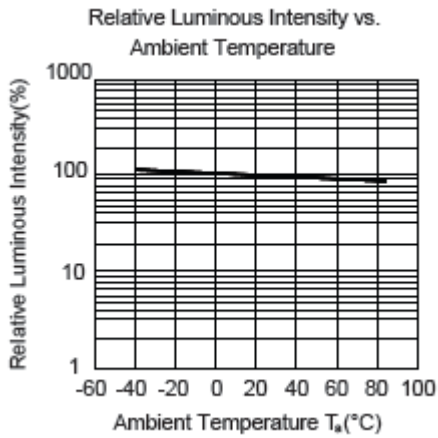
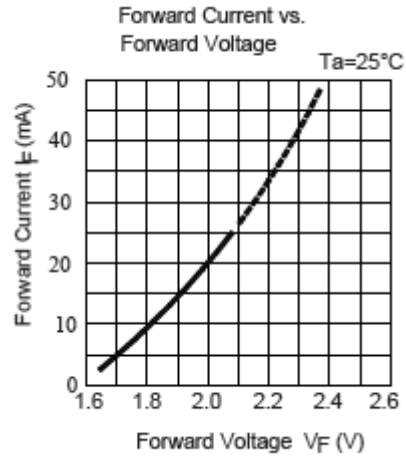
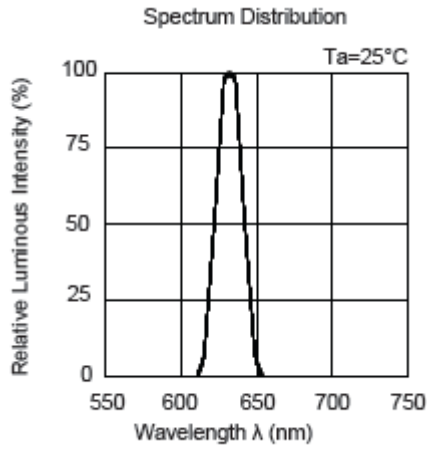
Parmeter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity(R)	IV	80	/	120	mcd	IF=20mA
Luminous Intensity(G)	IV	400	/	600	mcd	IF=20mA
Luminous Intensity(B)	IV	80	/	120	mcd	IF=20mA
Dominant Wavelength(R)	λ_d	620	625	630	nm	IF=20mA
Dominant Wavelength(G)	λ_d	520	525	530	nm	IF=20mA
Dominant Wavelength(B)	λ_d	460	465	470	nm	IF=20mA
Forward Voltage(R)	VF	1.90	2.00	2.20	v	IF=20mA
Forward Voltage(G)	VF	2.90	3.20	3.60	v	IF=20mA
Forward Voltage(B)	VF	2.90	3.20	3.60	v	IF=20mA
Viewing Angle	2 θ 1/2		120		deg	IF=20mA
Reverse Current	IR	/	/	10	uA	VR=5V

Absolute Maximum Ratings (Ta=25°C)

Parmeter	Symbol	Maximum	Unit
Peak Forward Current(1/10 Duty Cycle, 0.1ms Pulse Width)	IPF	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage	VR	5	v
Electrostatic Discharge	ESD	2000	v
Operating Temperature Range	Topr	-40to+90	°C
Storage Temperature Range	Tstg	-40to+90	°C
Reflow Soldering	Tsld	260°C for 10secs	
Hand Soldering	Tsld	350°C for 3secs	

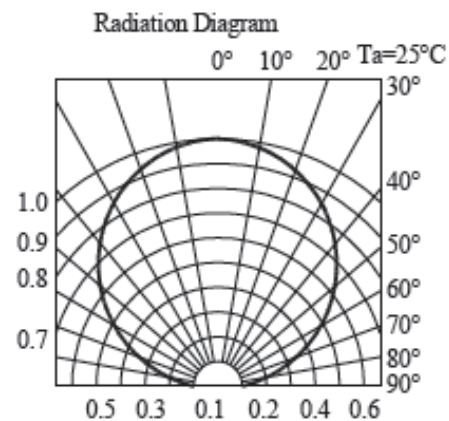
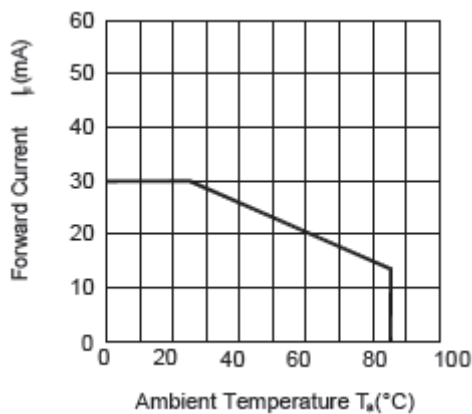
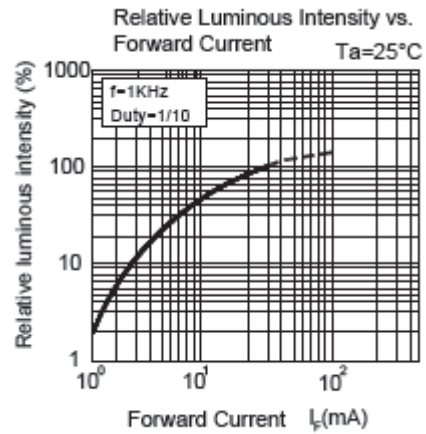
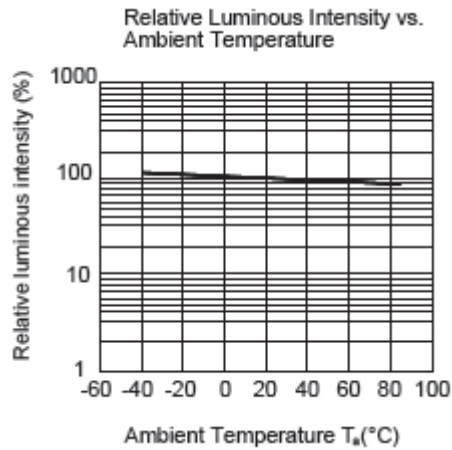
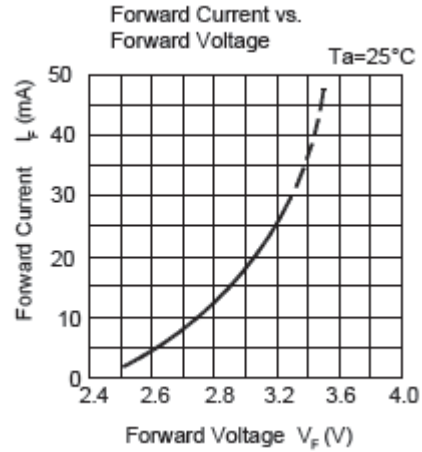
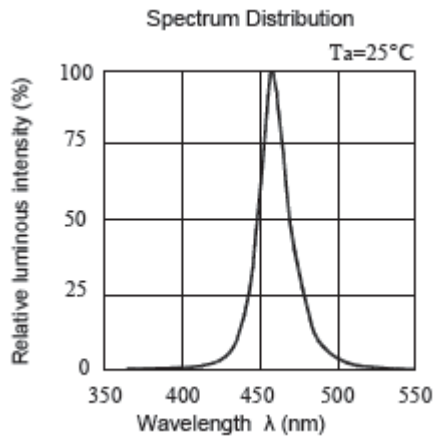


Typical electro-optical Characteristics Curves (Red)



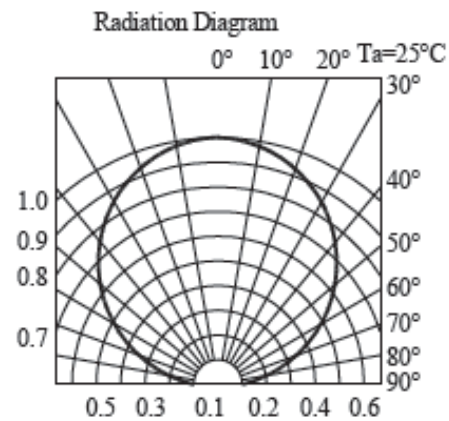
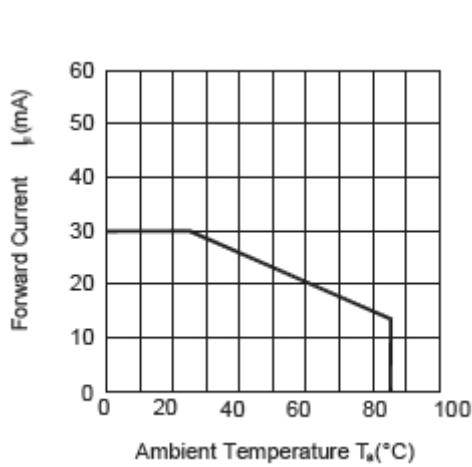
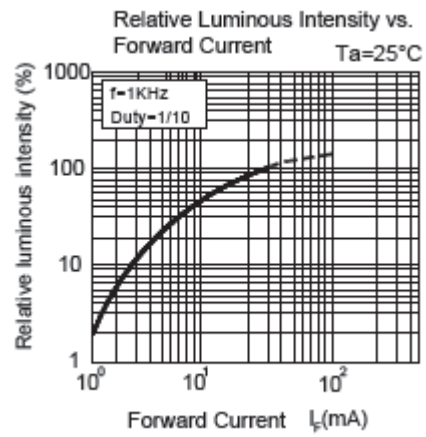
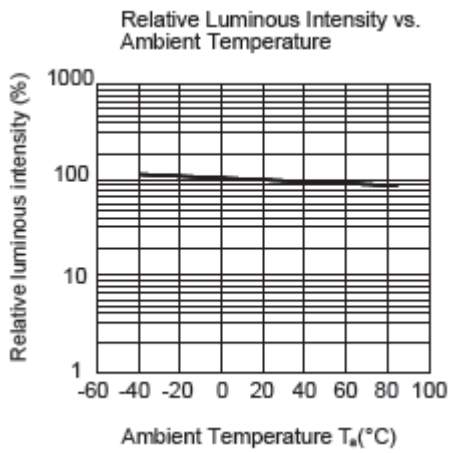
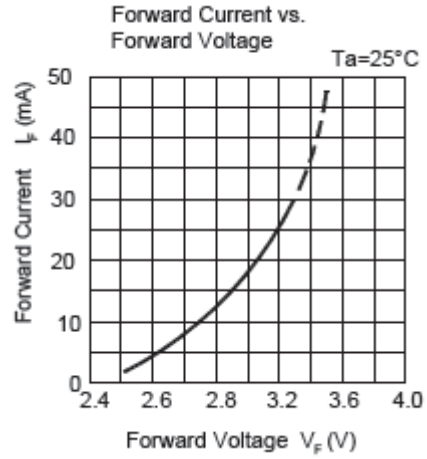
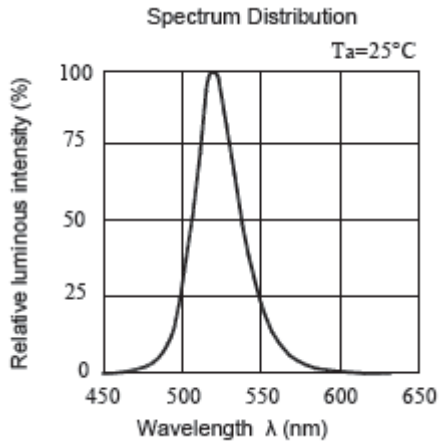


Typical electro-optical Characteristics Curves (Blue)





Typical electro-optical Characteristics Curves (Green)



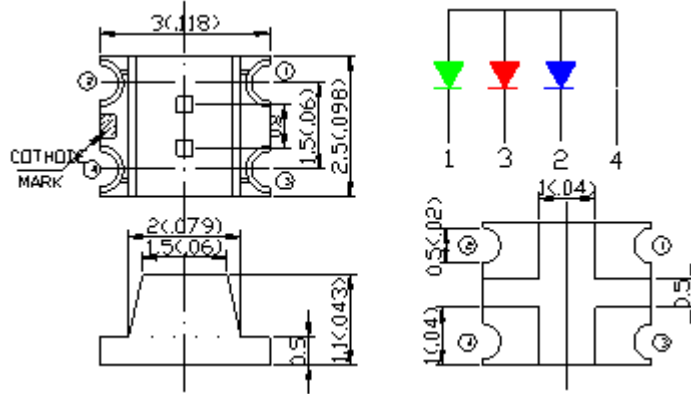


Reliability

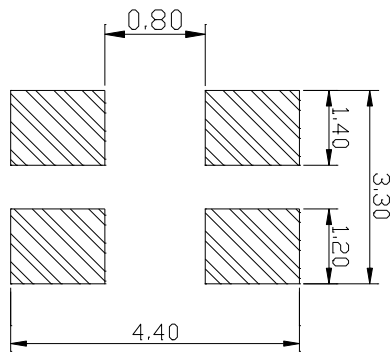
No.	Items	Test Condition	Test Hours/Cycles	Sample Size
1	Solder Heat	TEMP: 240°C±5°C	5 sec/3cycles	48 pcs
2	Temperature Cycle	90°C~ 25°C ~ -30°C ~ 25°C 30m 5m 30m 5m	300Cycles	48 Pcs
3	Thermal Shock	100°C~ -55°C 10m 10m	100Cycles	48 Pcs
4	Operation Life	If=20mA	1000 Hrs	48 Pcs
5	High Temperature Storage	Temp:90°C	1000Hrs	48 Pcs
6	Low Temperature Storage	Temp:-30°C	1000Hrs	48 Pcs
7	High Temperature/High Humidity	80°C / R.H80%	1000Hrs	48 Pcs



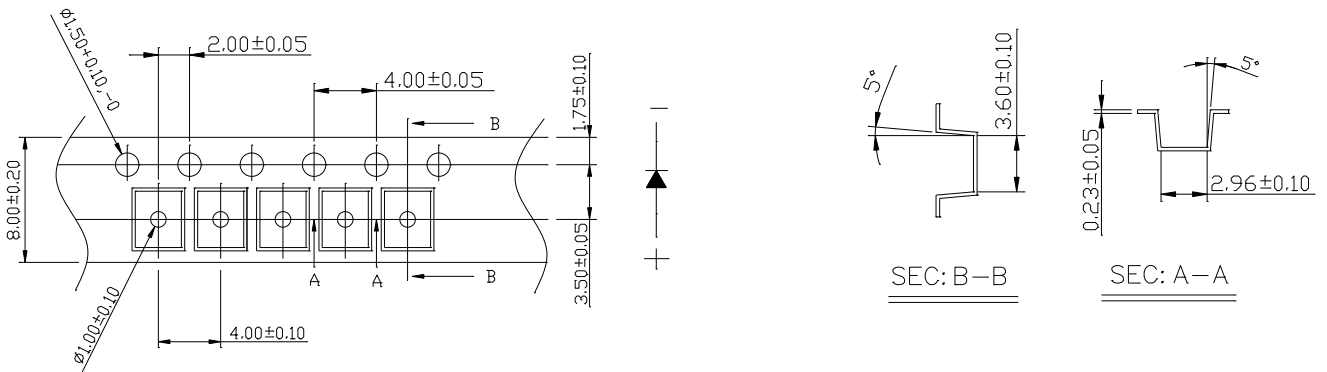
Package dimensions (Unit : mm)



Recommended Soldering Pad Design (Unit : mm)

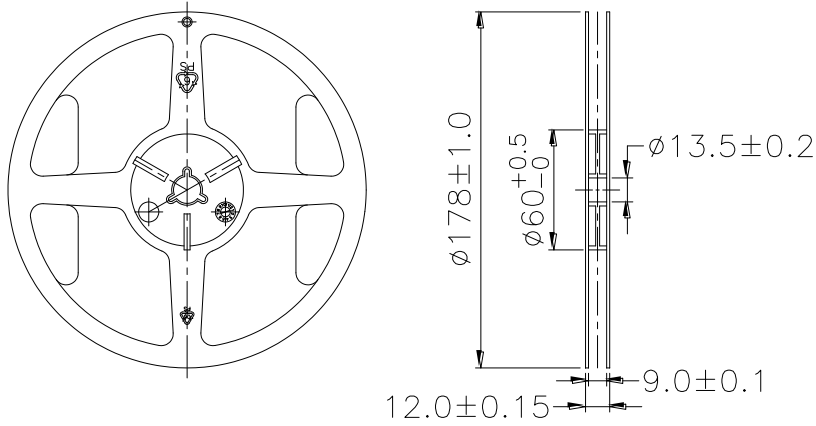


Taping and package Spec (※Tape Specification:3,000pcs Per Reel)





Package Dimensions of Reel



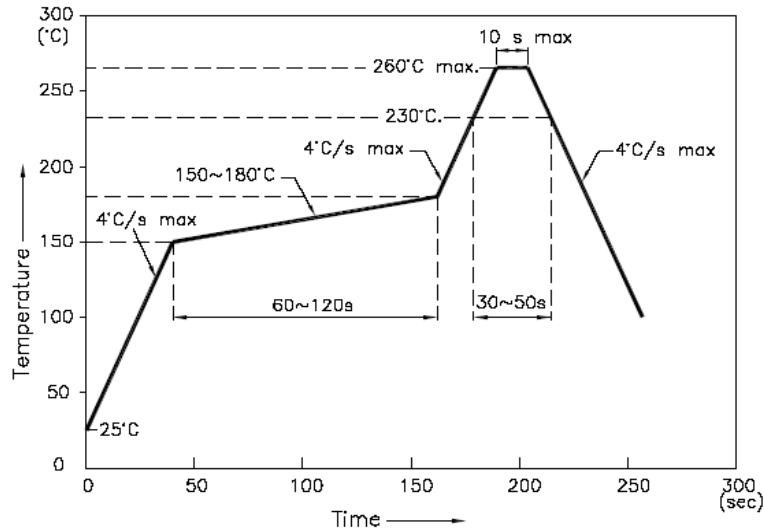
Label (例)

Part No.:SX-XXXXX-XXXX-X-XX-X	
Lot No.:XXXXXXXX	
REF.:XXXX	QTY:XXXX pcs
HUE:XXX	
CAT:XXXX	BIN: XX

Part No:产品型号
 Lot No:生产批次
 QTY: 数量
 REF:亮度
 HUE:波长或色区
 CAT:电压
 BIN:分选等级



Reflow Temp/Time



NOTES:

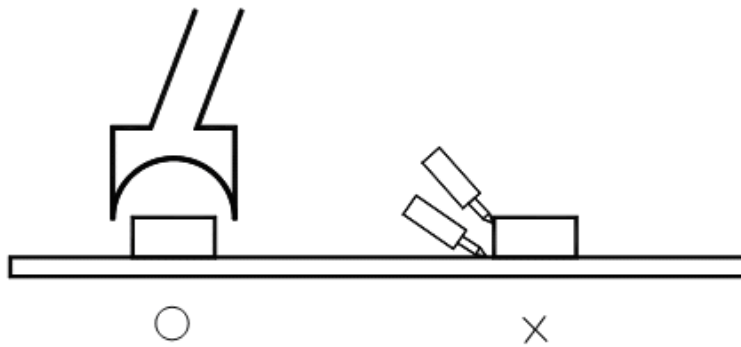
1. We recommend the reflow temperature $245^{\circ}\text{C} (\pm 5^{\circ}\text{C})$. the maximum soldering temperature should be limited to 260°C .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
Number of reflow process shall be 2 times or less.

Soldering iron

Basic spec is $\leq 5\text{sec}$ when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 15W, and temperatures should be controllable. Surface temperature of the device should be under 230°C .

Rework

1. Customer must finish rework within 5 sec under 260°C.
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



Test circuit

