

承認書

SPECIFICATION FOR APPROVAL

● 客戶名称	
● Customer	
● 客戶品號	
● Customer Part No.	
● 产品品號	HC-QH-A1844BYGURDS530-E2
● Brightek Part No.	
● 产品規格描述	Φ3圆头无边4孔空空1普绿1红套子灯 左正右负
● Specification	
● 製錶人	王清
● Prepared By	
● 審核	李东平
● Checkedy	
● 客戶回簽	
● Customer	
● 送样日期:	
● Deliver date:	

說明：一、謹致執事者：茲提供敝公司產品之有關詳細規格及圖面資料，敬請給予辦理測試認定手續。同時敬請送返一份附有貴公司簽認之測試認定後之樣品認定書。

We are sending you our specification and drawings for your approval. Please return to us one copy "For Approval" with your approved signatures.

二、客戶意見欄 Customer's Proposal

☐ Approve 承認 (請於認可欄中簽名)

☐ Disagree 不同意

Reason 原因:

光宇集团 中高端光电元件定制企业，20多年封装经验，品质稳定，值得信赖，体现光的价值。

光宇集团国际（香港）有限公司

GTU Group International (HK) Co., Limited

广东光宇半导体科技有限公司

工厂地址：东莞市寮步镇松湖智谷A2栋3楼

东莞市弘呈光电有限公司

DongGuan Hong cheng Optoelectronics Co.,Ltd.

工厂地址：广东省东莞市樟木头镇莞樟路樟木头段15号15栋2108号

ADD:Room 2108,No.1 building, Wanhui Garden, East Guanzhang Road, Zhangmutou, Dongguan, Guangdong, China

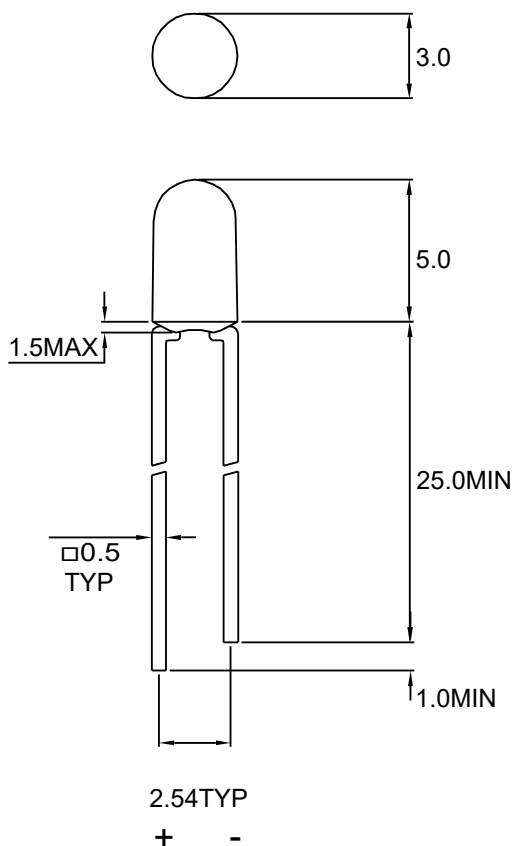
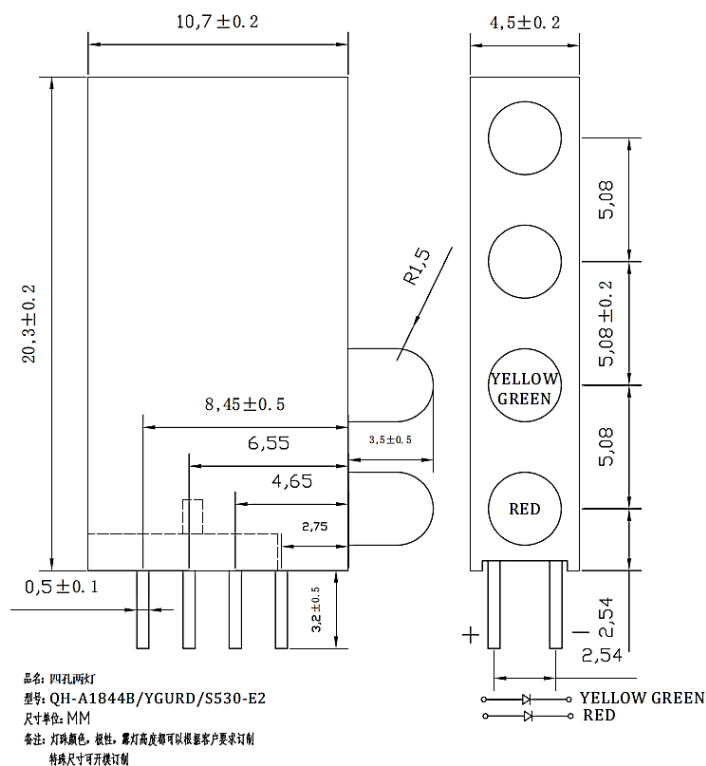
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业务联系人：李顺阳 13925714318 (微信同号) 销售总监 企业邮箱：sales@led-hc.com



版本/版次	修改日期	修改内容

Package Dimensions



Note : 1.All dimension are in millimeter tolerance is ± 0.25 mm unless otherwise noted.
2.Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Ratings	UNIT
		G	
Forward Current	IF	30	mA
Peak Forward Current Duty 1/10@10KHz	IFP	120	mA
Power Dissipation	PD	100	mW
Reverse Current @5V	Ir	10	μA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Electrostatic Discharge	ESD	2	KV
Reverse Voltage	VR	5	V
Dominant Wavelength	λd	565-575	Nm

Typical Electrical & Optical Characteristics (Ta=25 °C)

PART NO	MATERIAL	COLOR		Peak wave length λPnm	Spectral halfwidth Δλnm	Forward voltage @20mA(V)		Luminous intensity @10mA(mcd)		Viewing angle 2θ 1/2 (deg)
		Emitted	Lens			Min.	Max.	Min.	Typ.	
	GaP	Green	Green Diffused	570	30	1.7	2.6	50	120	80

Note : 1.The forward voltage data did not including ±0.1V testing tolerance.

2. The luminous intensity data did not including ±15% testing tolerance.

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Ratings	UNIT
		R	
Forward Current	IF	30	mA
Peak Forward Current Duty 1/10@10KHz	IFP	120	mA
Power Dissipation	PD	100	mW
Reverse Current @5V	Ir	10	μA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Electrostatic Discharge	ESD	2	KV
Reverse Voltage	VR	5	V
Dominant Wavelength	λd	620-630	Nm

Typical Electrical & Optical Characteristics (Ta=25 °C)

PART NO	MATERIAL	COLOR		Peak wave length λPnm	Spectral halfwidth Δλnm	Forward voltage @20mA(V)		Luminous intensity @10mA(mcd)		Viewing angle 2θ 1/2 (deg)
		Emitted	Lens			Min.	Max.	Min.	Typ.	
	GaP	RED	RED Diffused	620	30	1.7	2.6	50	120	80

Note : 1.The forward voltage data did not including ±0.1V testing tolerance.

2. The luminous intensity data did not including ±15% test

Typical Electro-Optical Characteristics Curve

G CHIP

Fig.1 Forward current vs. Forward Voltage

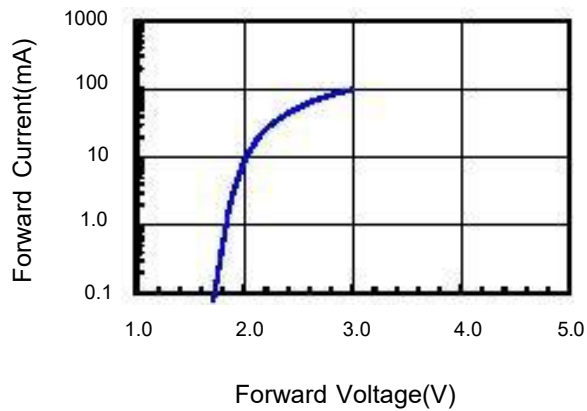


Fig.2 Relative Intensity vs. Forward Current

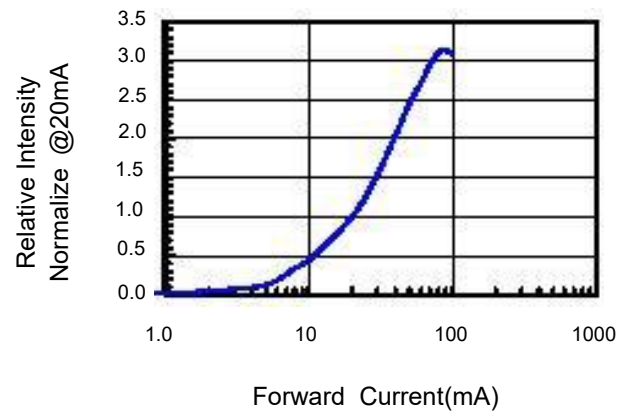


Fig.3 Forward Voltage vs. Temperature

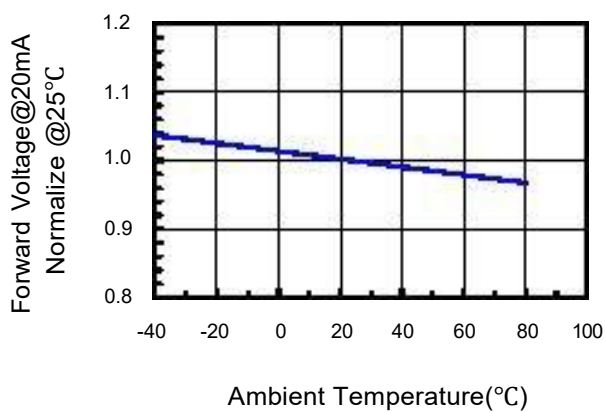


Fig.4 Relative Intensity vs. Temperature

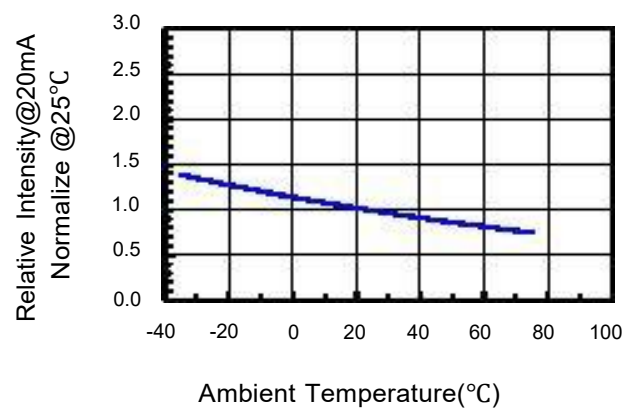
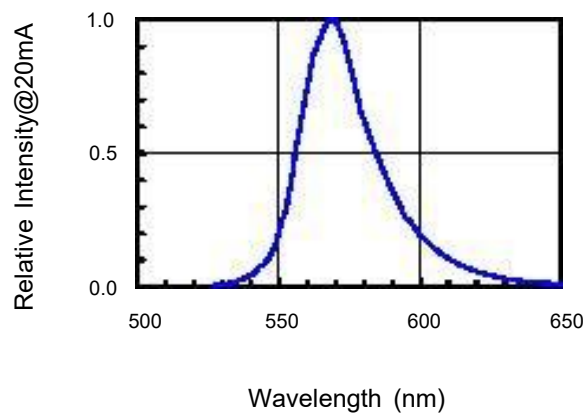


Fig.5 Relative Intensity vs. Wavelength



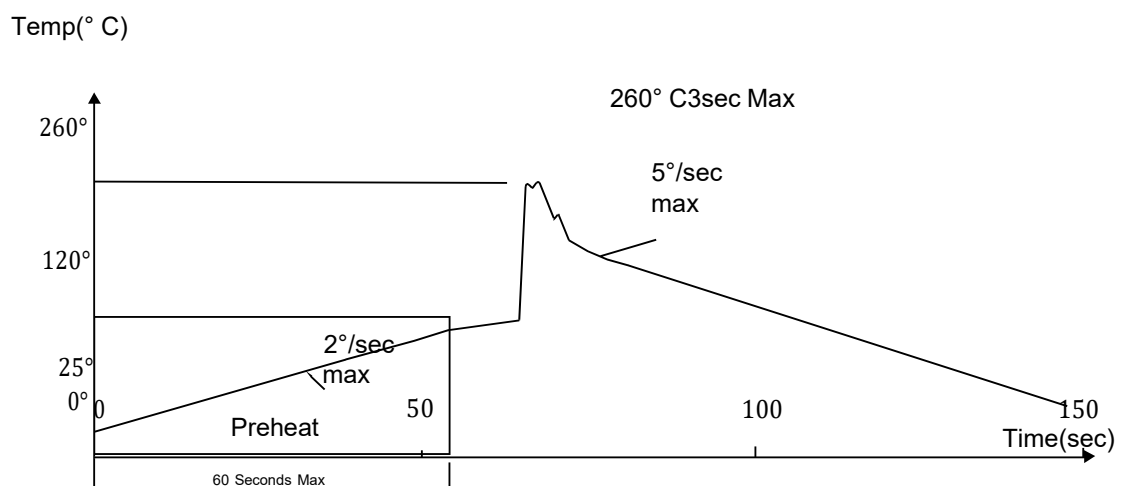
Soldering Condition(Pb-Free)

1. Iron:

Soldering Iron:30W Max
 Temperature 350° C Max
 Soldering Time:3 Seconds Max(One time only)
 Distance:2mm Min(From solder joint to case)

2. Wave Soldering Profile

Dip Soldering
 Preheat: 120° C Max
 Preheat time: 60seconds Max
 Ramp-up
 2°C/sec(max)
 Ramp-Down:-5° C/sec(max)
 Solder Bath:260° C Max
 Dipping Time:3 seconds Max
 Distance:2mm Min(From solder joint to case)



Note: 1. Wave solder should not be made more than one time.
 2. You can just only select one of the soldering conditions as above.

Reliability Test:

Test Item	Test Condition	Description	Reference Standard
Operating Life Test	1.Under Room Temperature 2.If=20mA 3.t=1000 hrs (-24hrs, +72hrs)	This test is conducted for the purpose of determining the resistance of a part in electrical and thermal stressed.	MIL-STD-750: 1026 MIL-STD-883: 1005 JIS C 7021: B-1
High Temperature Storage Test	1.Ta=105 °C±5 °C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of high temperature for hours.	MIL-STD-883:1008 JIS C 7021: B-10
Low Temperature Storage Test	1.Ta=-40 °C±5 °C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of low temperature for hours.	JIS C 7021: B-12
High Temperature High Humidity Test	1.Ta=65 °C±5 °C 2.RH=90 %~95% 3.t=240hrs ±2hrs	The purpose of this test is the resistance of the device under tropical for hours.	MIL-STD-202:103B JIS C 7021: B-11
Thermal Shock Test	1.Ta=105 °C±5 °C&-40°C±5 °C (10min) (10min) 2.total 10 cycles	The purpose of this is the resistance of the device to sudden extreme changes in high and low temperature.	MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1011
Solder Resistance Test	1.T.Sol=260 °C±5 °C 2.Dwell time= 10 ±1sec.	This test intended to determine the thermal characteristic resistance of the device to sudden exposures at extreme changes in temperature when soldering the lead wire.	MIL-STD-202: 210A MIL-STD-750: 2031 JIS C 7021: A-1
Solderability Test	1.T.Sol=230 °C±5 °C 2.Dwell time=5 ±1sec	This test intended to see soldering well performed or not.	MIL-STD-202: 208D MIL-STD-750: 2026 MIL-STD-883: 2003 JIS C 7021: A-2