

承 认 书

SPECIFICATION FOR APPROVAL

客 户:

CUSTOMER

品 名: 0602侧发光翠绿LED

DESCRIPTION

型 号: HQ-0602UGC

MODEL

日 期: 2015.12.31

DATE

承 制 方

MANUFACTURER:

制 表 DRAFTING	审 核 CHECK	核 准 APPROVE
李丽		

使 用 方

USER:

核 准 APPROVE	簽 章

PRELIMINARY SPEC



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

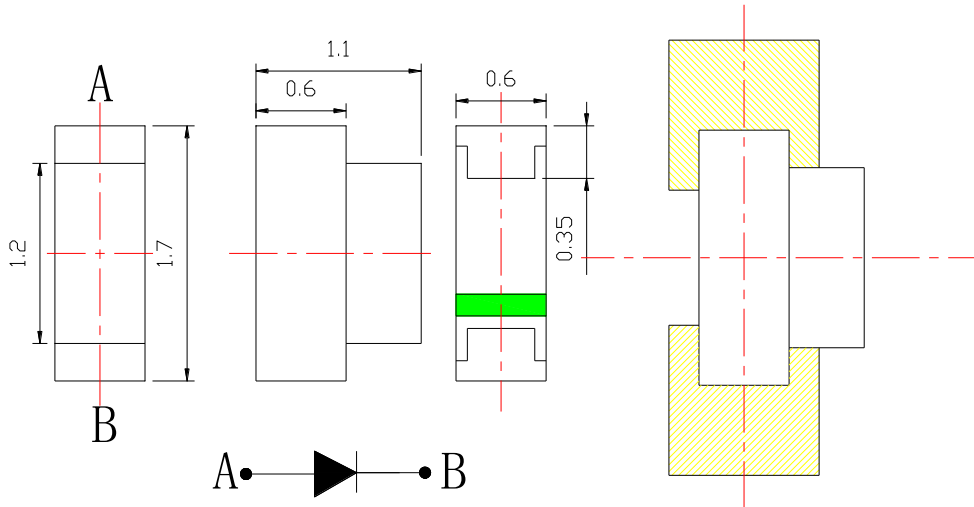
Features

- _1.7mmX0.6mm SMT LED, 1.1THICKNESS.
- _LOW POWER CONSUMPTION.
- _WIDE VIEWING ANGLE.
- _IDEAL FOR BACKLIGHT AND INDICATOR.
- _VARIOUS COLORS AND LENS TYPES AVAILABLE.
- _PACKAGE: 4000 PCS / REEL.
- _RoHS COMPLIANT.

Description

The GREEN source color devices are made with GaN on Sapphire Light Emitting Diode. Static electricity and surge damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs. All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
HQ-0602UGC	GREEN (GaN)	WATER CLEAR	250	450	120

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	GREEN	518	526	nm	IF=20mA
λD	Dominant Wavelength	GREEN			nm	IF=20mA
Δλ1/2	Spectral Line Half-width	GREEN	25		nm	IF=20mA
C	Capacitance	GREEN	105		pF	VF=0V;f=1MHz
VF	Forward Voltage	GREEN	3.0	3.4	V	IF=20mA
IR	Reverse Current	GREEN		2	uA	VR = 7V

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

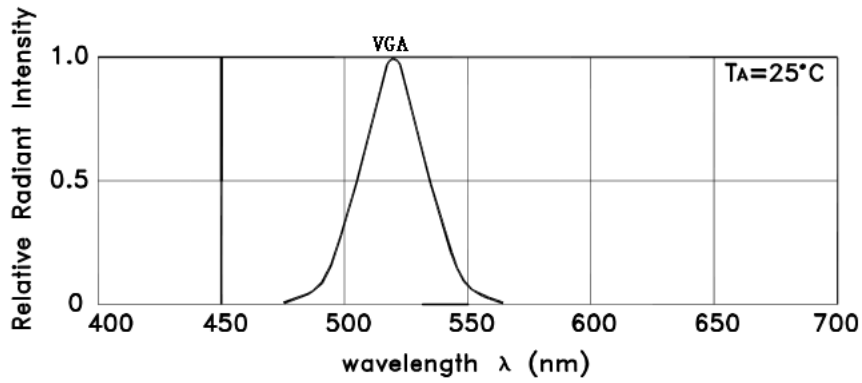
Note: Accuracy may depend on the sorting parameters

Absolute Maximum Ratings at TA=25°C

Parameter	GREEN	Units
Power dissipation	135	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

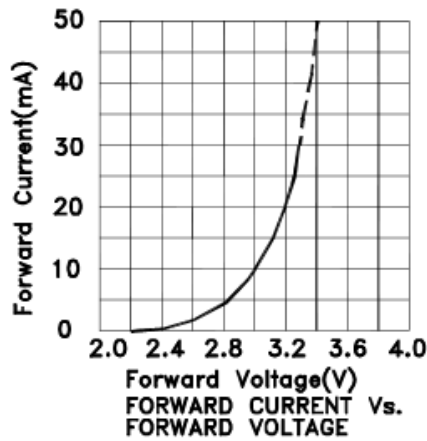
Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

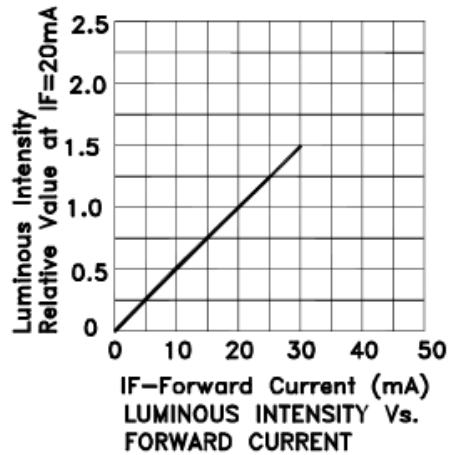


RELATIVE INTENSITY Vs. WAVELENGTH

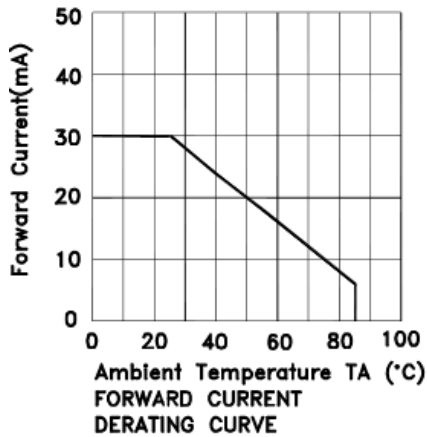
E6X0602VGAC1UDA GREEN



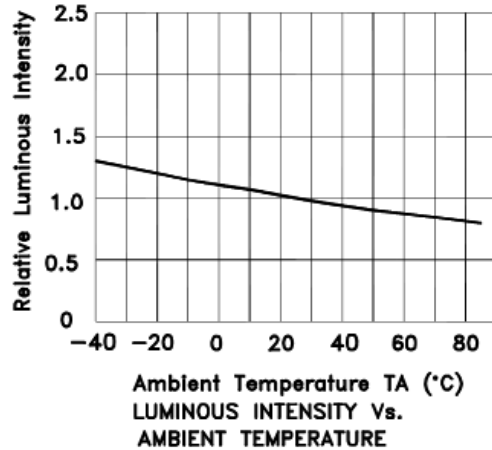
FORWARD CURRENT Vs. FORWARD VOLTAGE



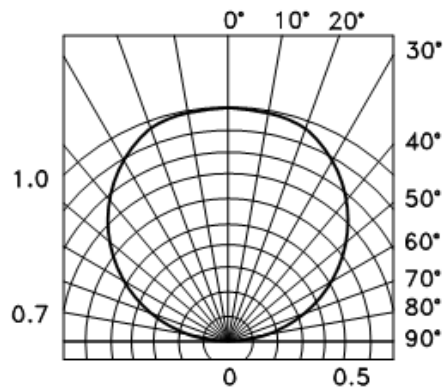
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

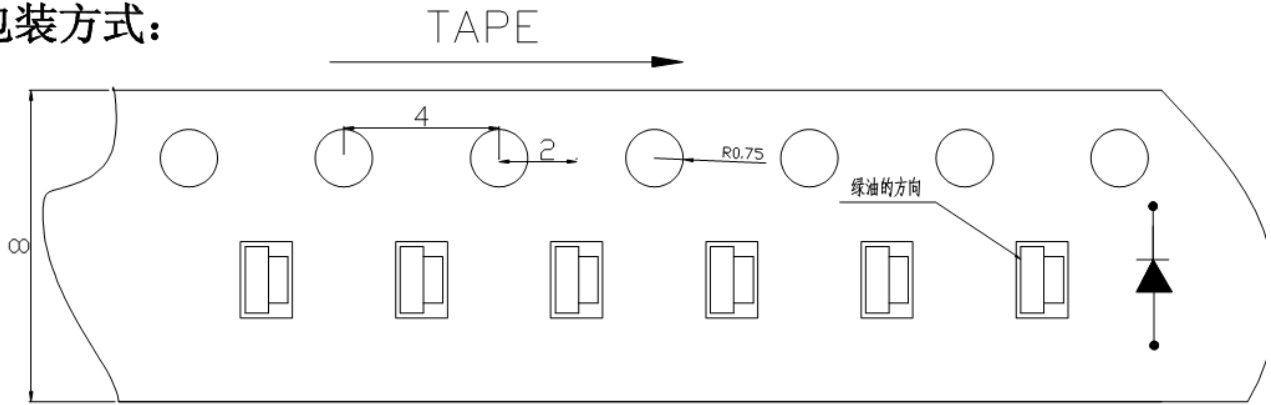
可靠性 RELIABILITY

测试项目及结果 Test Items and Results

序号	试验项目	参考标准	试验条件	持续时间	取样数	接收水准(不合格
						数量/抽样总数)
1	温度循环	JEITA ED-4701	-40°C~25°C~100°C~ 25°C 30 分钟 5 分钟 30 分 钟 5 分钟	循环 100 回 合	50	0/50
2	冷热冲击	MIL-STD-202G	-40°C~100°C 15 分钟 15 分钟	循环 500 回 合	50	0/50
3	高温储存	JEITA ED-4701 200 201	T _a =100°C	1000 小 时	50	0/50
4	低温储存	JEITA ED-4701 200 201	T _a =-40°C	1000 小 时	50	0/50
5	常温寿命 试验		T _a =25±5°C I _F =20mA	1000 小 时	50	0/50
6	高温高湿 寿命试验		T _a =60°C RH=85% I _F =20mA	1000 小 时	50	0/50
7	可焊性 (回流焊)	JEITA ED-4701 300 303	T _{sol} =235°C ±5°C,5 秒 使用助焊剂	焊接一 次, 5 秒	10	0/10
8	耐焊性 (回流焊)	JEITA ED-4701 300 301	T _{sol} =260°C,10 秒 预处理: 35°C 95%RH 96 小时	焊接二 次, 每次 10 秒	10	0/10
备注	以上试验项目如与客户试验要求存在差异的或者特殊客户特殊要求的可根据实际情况按照客户的要 求进行试作,客户未要求的按我司试验标准试作.不同产品使用不同电流进行测试					

包装PACKAGING

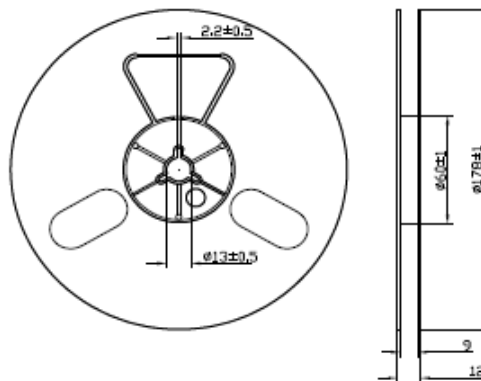
包装方式:



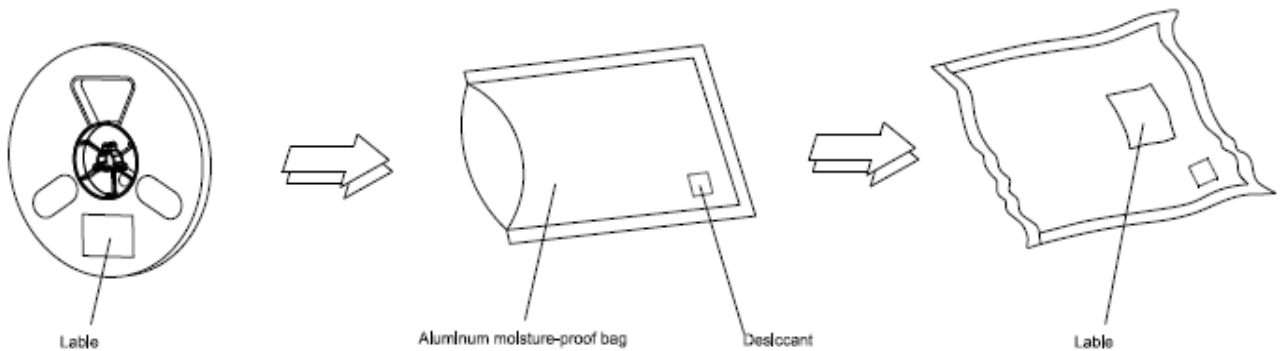
Package: 4000PCS/reel

Reel Dimensions

卷轴尺寸



Moisture Resistant Packaging 防潮带包装



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit: mm 注: 标注公差为 $\pm 0.1\text{mm}$, 单位: mm