



Features

- _ 1.05mmX0.55mm SMT LED, 0.45mm THICKNESS.
- _ LOW POWER CONSUMPTION.
- _ WIDE VIEWING ANGLE.
- _ IDEAL FOR BACKLIGHT AND INDICATOR.
- _ VARIOUS COLORS AND LENS TYPES AVAILABLE.
- _ PACKAGE: 3000 PCS / REEL.
- _ RoHS COMPLIANT.

0.45

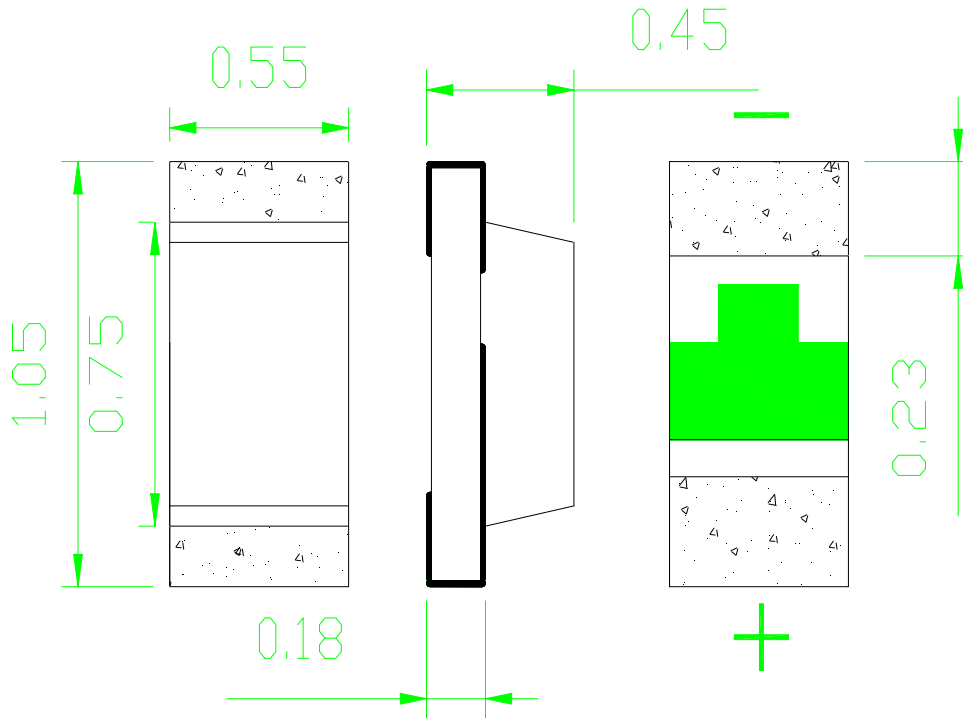
Description

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

Applications

- 1.Mobile phone Keypad indicator and backlight.
- 2.Flat backlight for LCD, switch and symbol.
- 3.Toys.

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

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
CL-BIT1005UYG-02	Yellow green	WATER CLEAR	20	50	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

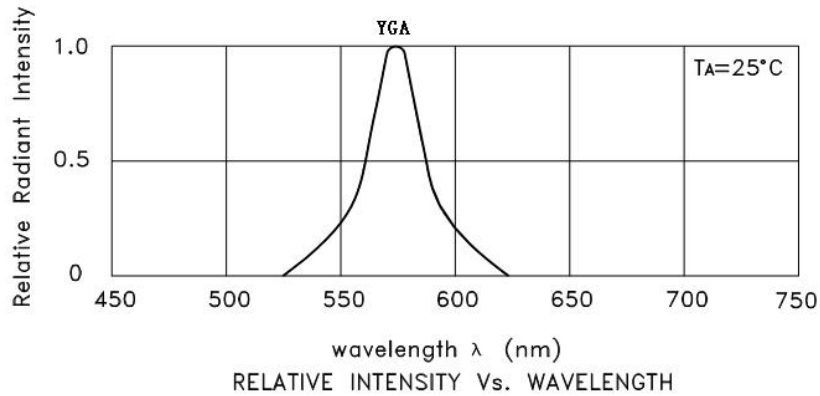
Symbol	Parameter	Device	Mix	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Yellow green	566	574	nm	IF=20mA
λ _D	Dominant Wavelength	Yellow green			nm	IF=20mA
Δλ _{1/2}	Spectral Line Half-width	Yellow green	30		nm	IF=20mA
C	Capacitance	Yellow green	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Yellow green	1.8	2.3	V	IF=20mA
IR	Reverse Current	Yellow green		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

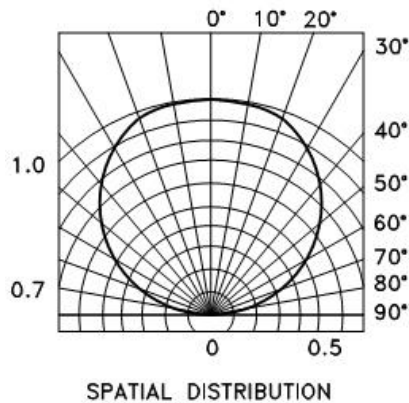
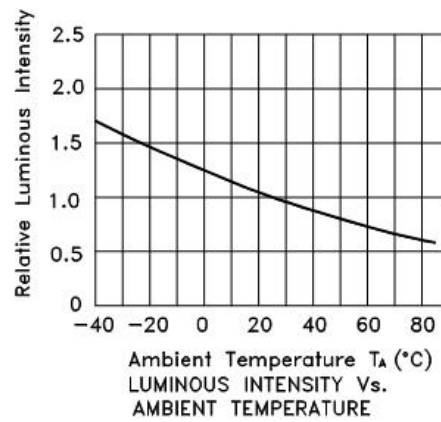
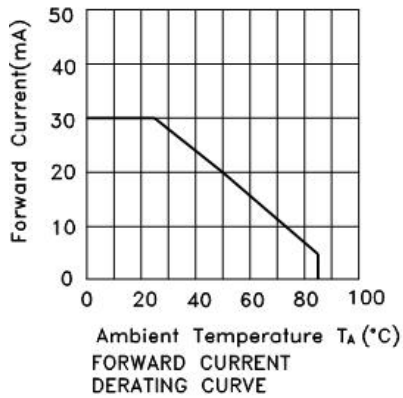
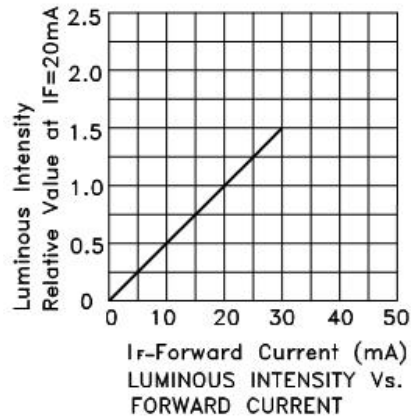
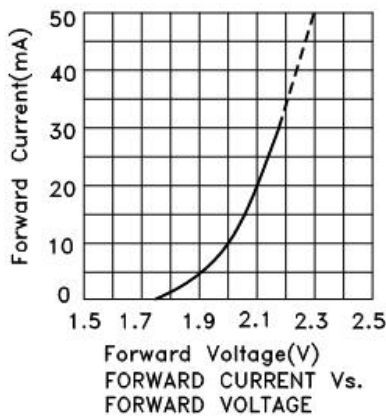
Parameter	Yellow green	Units
Power dissipation	75	mW
DC Forward Current	25	mA
Peak Forward Current [1]	80	mA
Reverse Voltage	5	V
Operating/Storage Temperature	40°C To +85°C	

Note:

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



Yellow green



RELIABILITY

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℃~25℃~100℃~ 25℃ 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℃~100℃ 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℃	1000 小时	50	0/50
4	低温储存	JEITA ED-4701 200 201	T _a =-40℃	1000 小时	50	0/50
5	常温寿命 试验		T _a =25±5℃ I _F =20mA	1000 小时	50	0/50
6	高温高湿 寿命试验		T _a =60℃ 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℃±5℃,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℃,10 秒 预处理: 35℃ 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					

Cautions

(1) Soldering Conditions

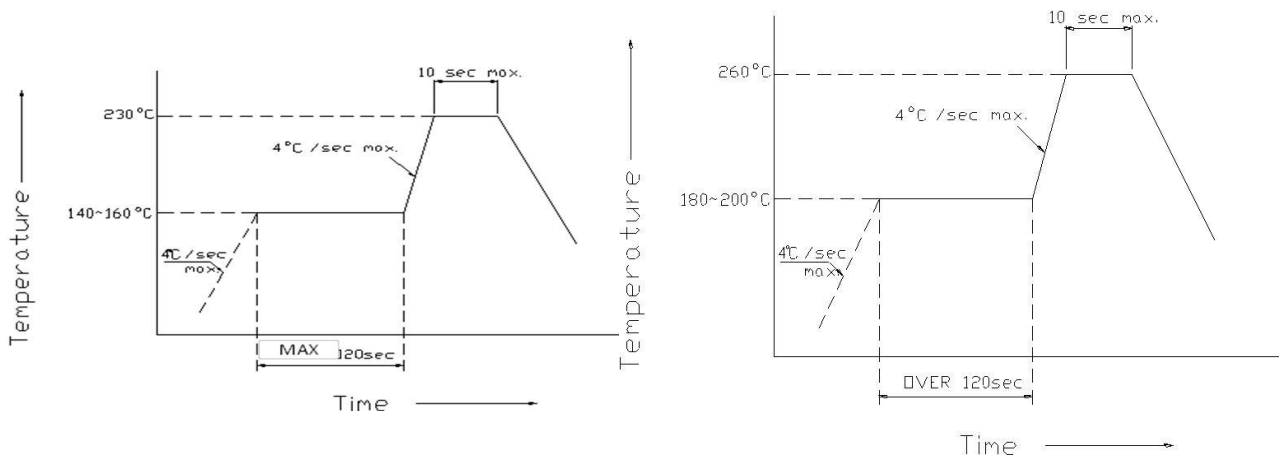
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.

(Recommended soldering conditions)

Reflow Soldering				Hand Soldering
Pre-heat Pre-heat time	Lead Solder	Lead-free Solder	Temperature Soldering time	350° C Max. 3 sec. Max. (one time only)
	Peak temperature Soldering time	140 ~ 160° C 120 sec. Max. 230° C Max. 10 sec. Max.		
Condition				

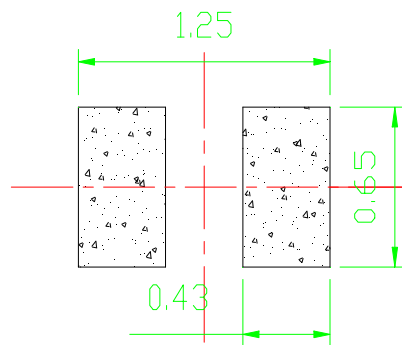
(Lead Solder)

(Lead-Free Solder)



Recommended Soldering Pattern

(Units : mm)



(2) Static Electricity

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

All devices, equipment and machinery must be properly grounded.

2.0V Damaged LEDs will show some unusual characteristics such as the forward voltage becomes lower, or the LEDs do not light at the low current. Criteria : (VF > 2.0V at IF=0.5mA)

(3)Moisture Proof Package

It is recommended that moisture proof package be used .

(4)Cautions:

4.1. Please check if there is air leak before opening the package, if so, please return the goods back to take drying process for later using.

4.2. Products can be used within 15days after packaging, after that, they must be:

4.2.1 Soldered within 24 hrs

4.2.2 Used in the condition: 30°C within and 60%RH below

4.2.3 Stored in 30%RH for moisture below.

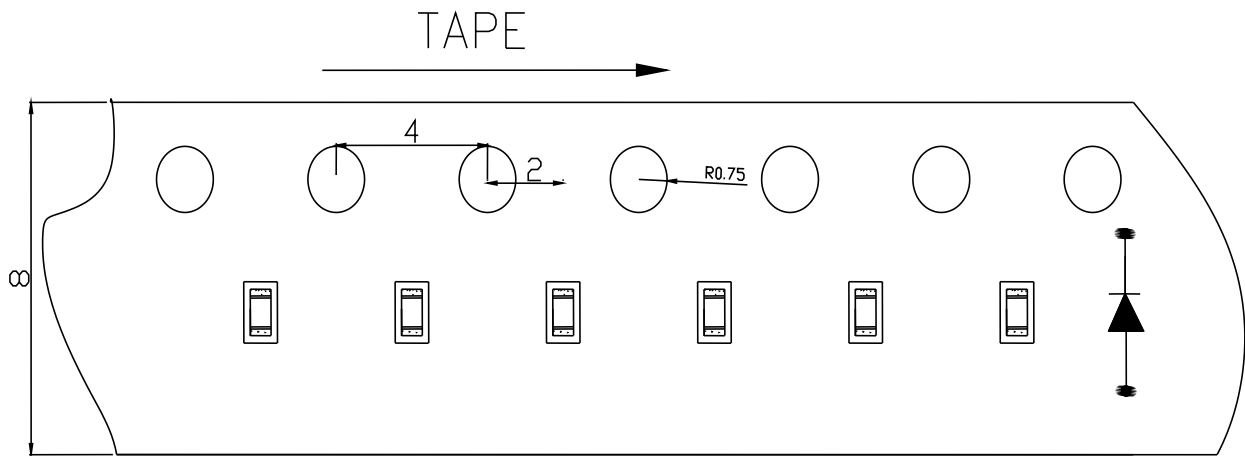
4.3. Products cannot be used for and over 15days after being packaged unless opening the package and take drying our process in 85°C/6H.

4.4. Products not be used for or over 60days after being packaged please return back to take drying out and packaging process for forward using.

4.5. Products not be used after opening the package need to be dried out for 85°C/6H

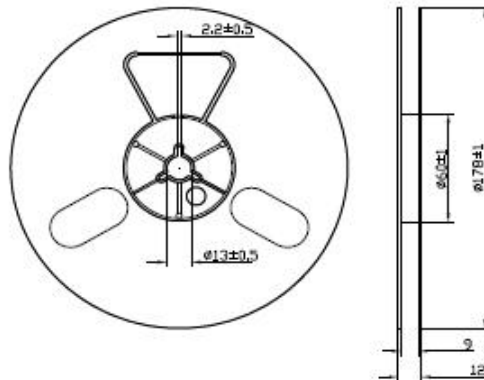
PACKAGING

The LEDs are packed in cardboard boxes after taping.

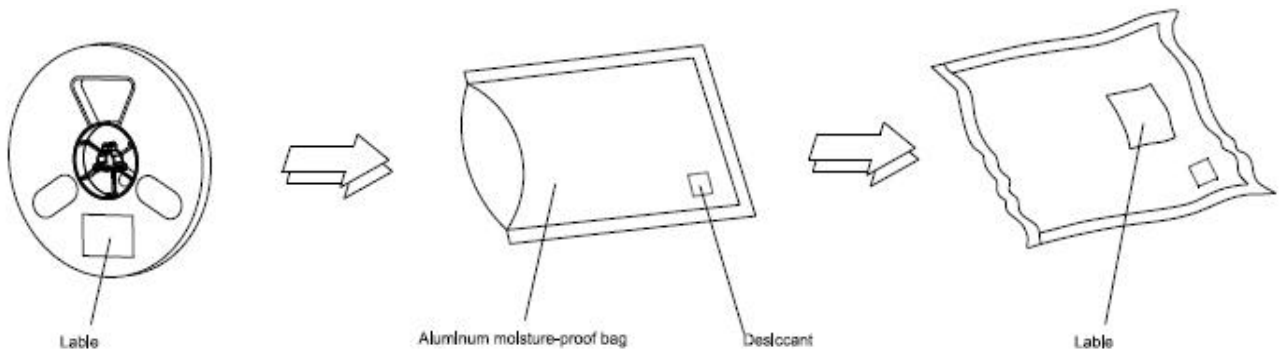


Package: 4000PCS/reel

Reel Dimensions



Moisture Resistant Packaging



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit: mm