### 3.2x2.7mm SURFACE MOUNT LED LAMP

Part Number: APB3227SEKCGKC

Super Bright Orange Green

#### **Features**

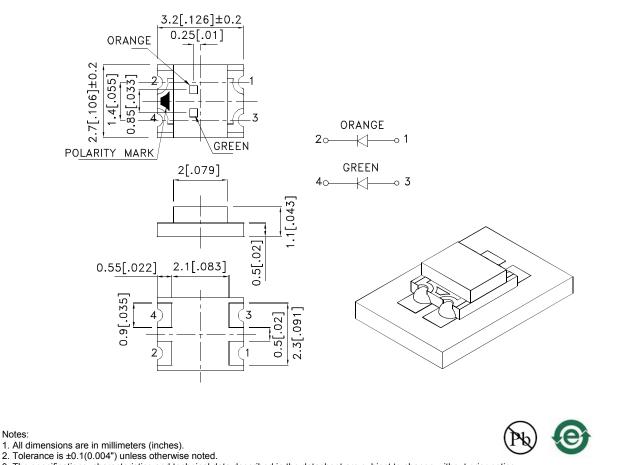
- 3.2mmx2.7mm SMT LED, 1.1mm thickness.
- Bi -color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

#### Description

The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

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

#### **Package Dimensions**



The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
The device has a single mounting surface. The device must be mounted according to the specifications.

**REV NO: V.2A CHECKED:** Allen Liu

DATE: AUG/23/2012 **DRAWN: C.H.Han** 

PAGE: 1 OF 6 ERP: 1203009744

#### Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min. Typ.	Тур.	201/2
APB3227SEKCGKC	Super Bright Orange (AlGaInP)	- Water Clear	120	250	- 100°
			*80	*180	
	Green (AlGaInP)		20	55	
			*20	*55	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
\* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

#### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange Green	610 574		nm	I⊧=20mA
λD [1]	Dominant Wavelength	Super Bright Orange Green	601 570		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange Green	29 20		nm	I⊧=20mA
С	Capacitance	Super Bright Orange Green	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange Green	2.1 2.1	2.5 2.5	V	I⊧=20mA
lr	Reverse Current	Super Bright Orange Green		10 10	uA	VR = 5V

Notes:

1.Wavelength: +/-1nm.

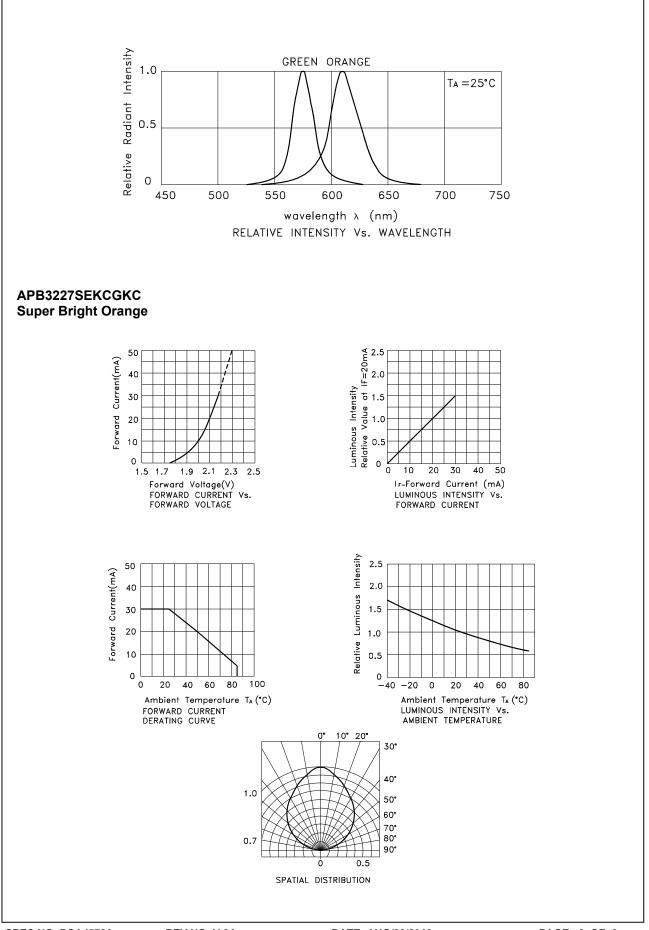
Forward Voltage: +/-0.1V.
Wavelength value is traceable to the CIE127-2007 compliant national standards.

#### Absolute Maximum Ratings at TA=25°C

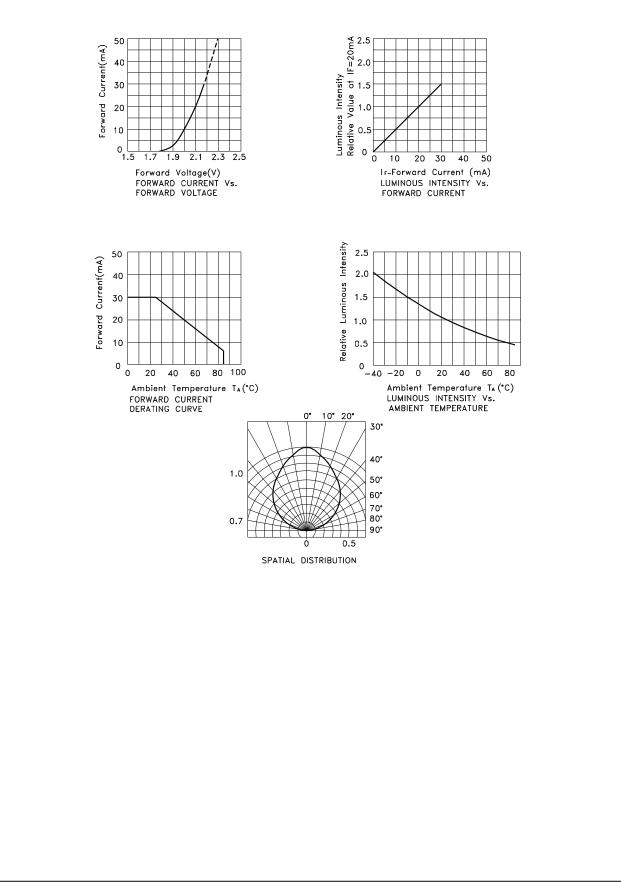
Parameter	Super Bright Orange	Green	Units	
Power dissipation	75	75	mW	
DC Forward Current	30	30	mA	
Peak Forward Current [1]	195	150	mA	
Reverse Voltage		V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

Note:

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



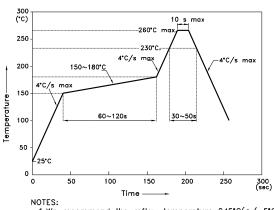
Green



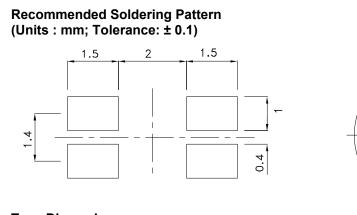
### APB3227SEKCGKC

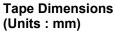
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

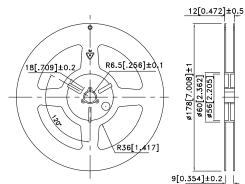
Reflow Soldering Profile For Lead-free SMT Process.



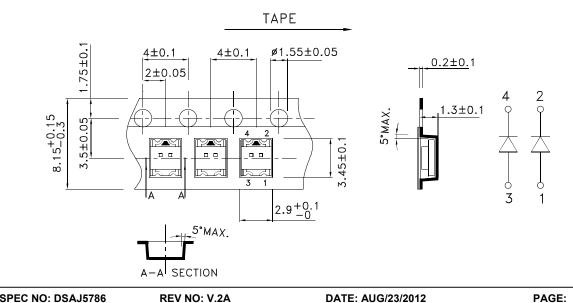
NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. 3.Number of reflow process shall be 2 times or less.







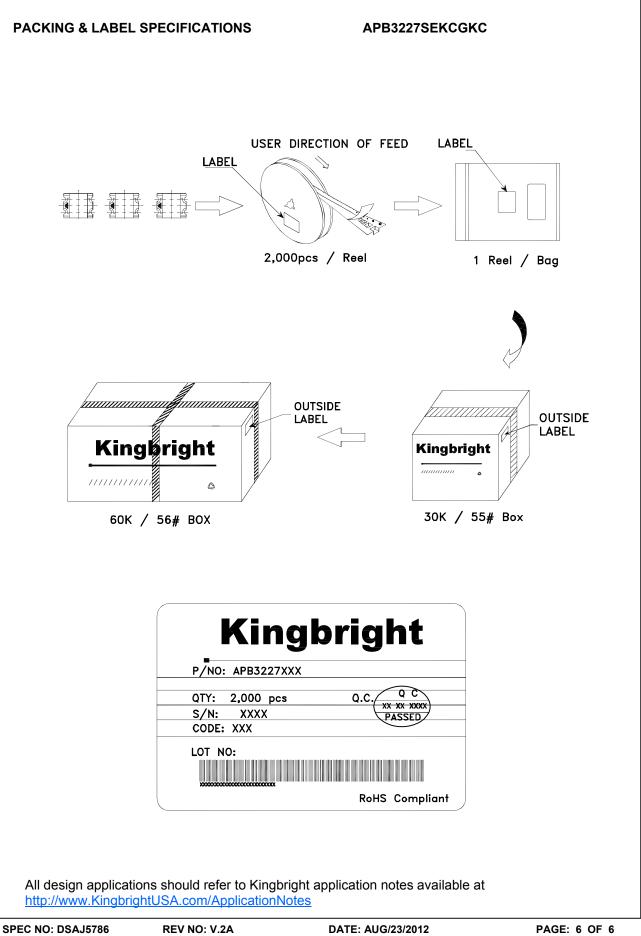
**Reel Dimension** 



**CHECKED:** Allen Liu

DATE: AUG/23/2012 DRAWN: C.H.Han

PAGE: 5 OF 6 ERP: 1203009744



REV NO: V.2A CHECKED: Allen Liu DATE: AUG/23/2012 DRAWN: C.H.Han