### 3.0mmx1.5mm SMD CHIP LED LAMP

Part Number: APL3015SGC-F01

Super Bright Green

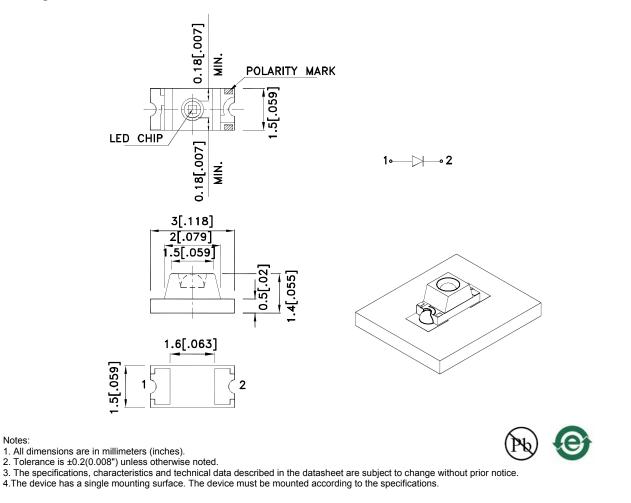
#### Features

- 3.0mmx1.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- 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 Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

#### Package Dimensions



SPEC NO: DSAE5924 APPROVED: WYNEC REV NO: V.9B CHECKED: Allen Liu DATE: DEC/03/2013 DRAWN: Q.M.Chen PAGE: 1 OF 5 ERP: 1203001615

#### Selection Guide

Selection Guide					
Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APL3015SGC-F01	Super Bright Green (GaP)	Water Clear	8	18	70°

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
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 Green	565		nm	I⊧=20mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	I⊧=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
Vf [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	I⊧=20mA
IR	Reverse Current	Super Bright Green		10	uA	VR=5V

Notes:

1.Wavelength: +/-1nm.

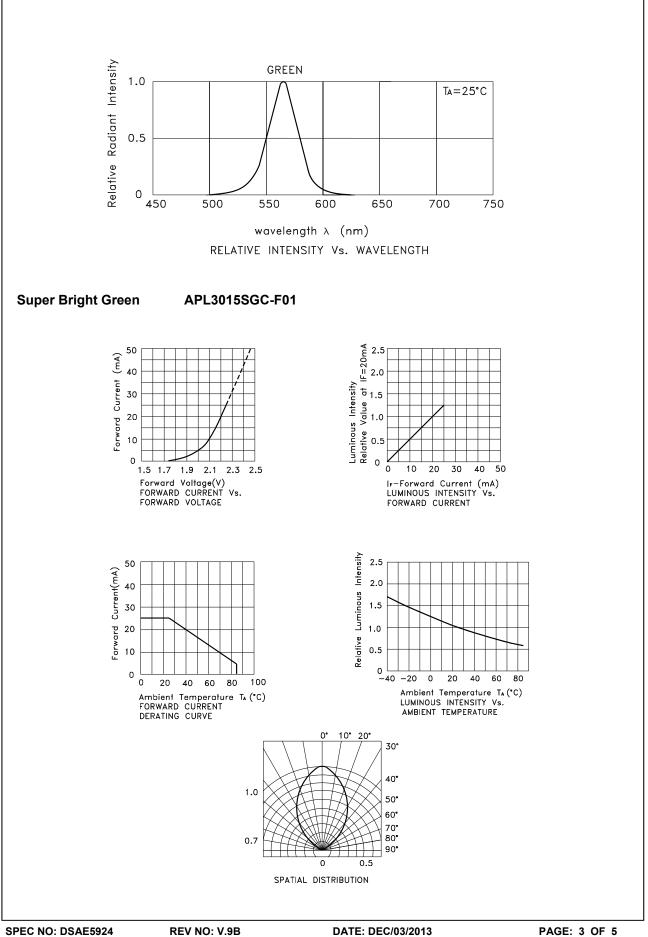
2. Forward Voltage: +/-0.1V.

3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

Parameter	Super Bright Green	Units		
Power dissipation	62.5	mW		
DC Forward Current	25	mA		
Peak Forward Current [1]	140	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

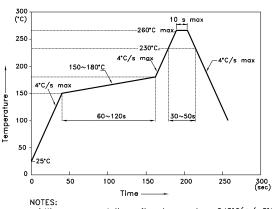
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.



### APL3015SGC-F01

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.



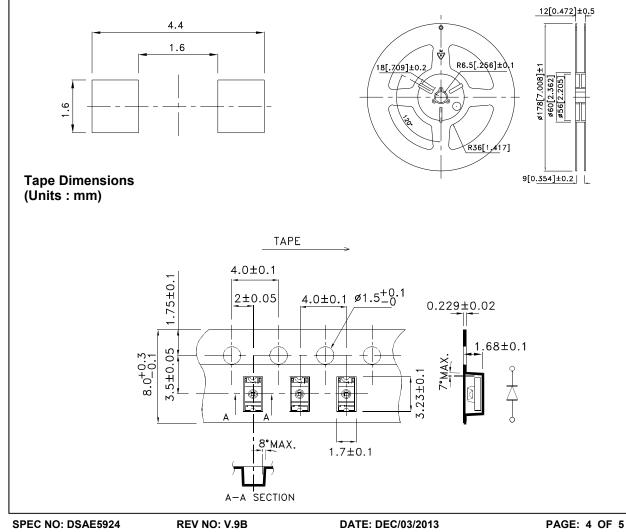
NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. 3.Number of reflow process shall be 2 times or less.



APPROVED: WYNEC

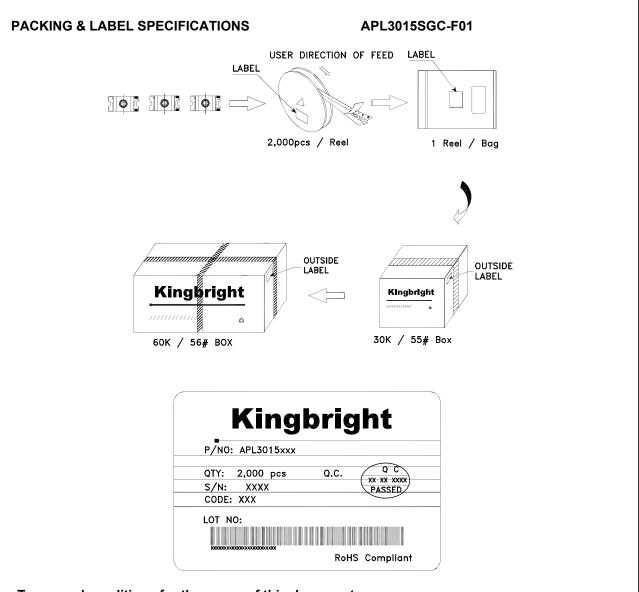
#### **Reel Dimension**

ERP: 1203001615



DRAWN: Q.M.Chen

**CHECKED: Allen Liu** 



### Terms and conditions for the usage of this document

- 1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.

6.All design applications should refer to Kingbright application notes available at <a href="http://www.KingbrightUSA.com/ApplicationNotes">http://www.KingbrightUSA.com/ApplicationNotes</a>

### **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Kingbright: APL3015SGC-F01