

# 3.2x1.6mm SMD CHIP LED LAMP

APTR3216SGC

SUPER BRIGHT GREEN

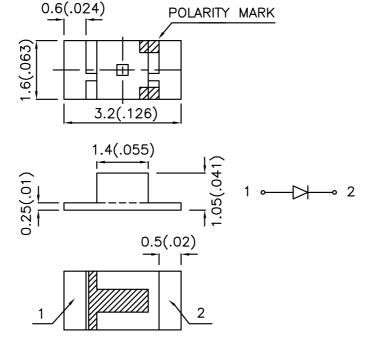
#### **Features**

- •3.2mmx1.6mm SMT LED,1.05mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VAVRIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS/REEL.
- •RoHS COMPLIANT.

# **Description**

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

# **Package Dimensions**



#### Notes:

- All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

 SPEC NO: DSAD1012
 REV NO: V.3
 DATE: MAR/20/2005
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 ERP:1203002406

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
APTR3216SGC	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	4	15	120°

Note:

# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
lR	Reverse Current	Super Bright Green		10	uA	VR = 5V

# Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Green	Units	
Power dissipation	105	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

Note:

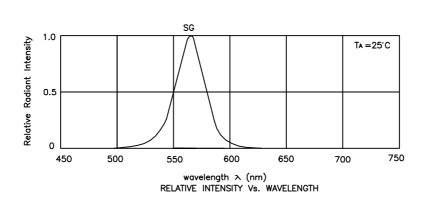
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 $<sup>1.\,\</sup>theta1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

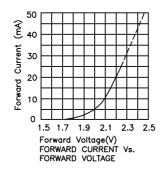
<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

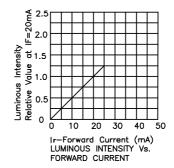
# **Kingbright**

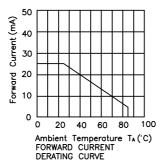


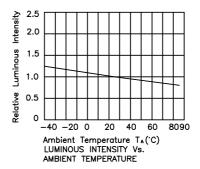
Super Bright Green

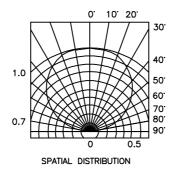
APTR3216SGC











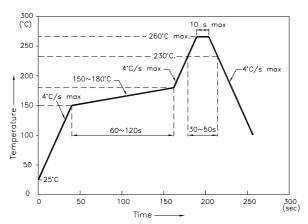
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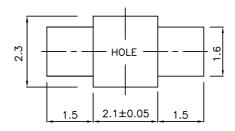
Reflow Soldering Profile For Lead-free SMT Process.



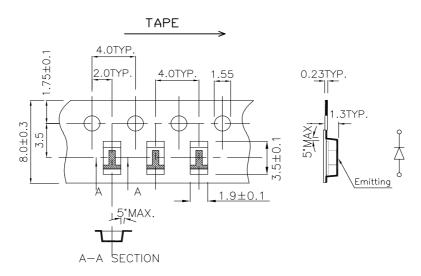
- NOTES: 1.We recommend the reflow temperature 245°C( $\pm$ / $\pm$ 5°C).The maximum soldering temperature should be limited to 260°C.
  - 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - 3. Number of reflow process shall be 2 times or less.

# **Recommended Soldering Pattern**

(Units: mm)



# **Tape Specifications** (Units: mm)



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.

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