Kingbright

3.0x2.5mm SURFACE MOUNT LED LAMP

APBL3025NSGC-F01	PURE ORANGE
	SUPER BRIGHT GREEN

Features

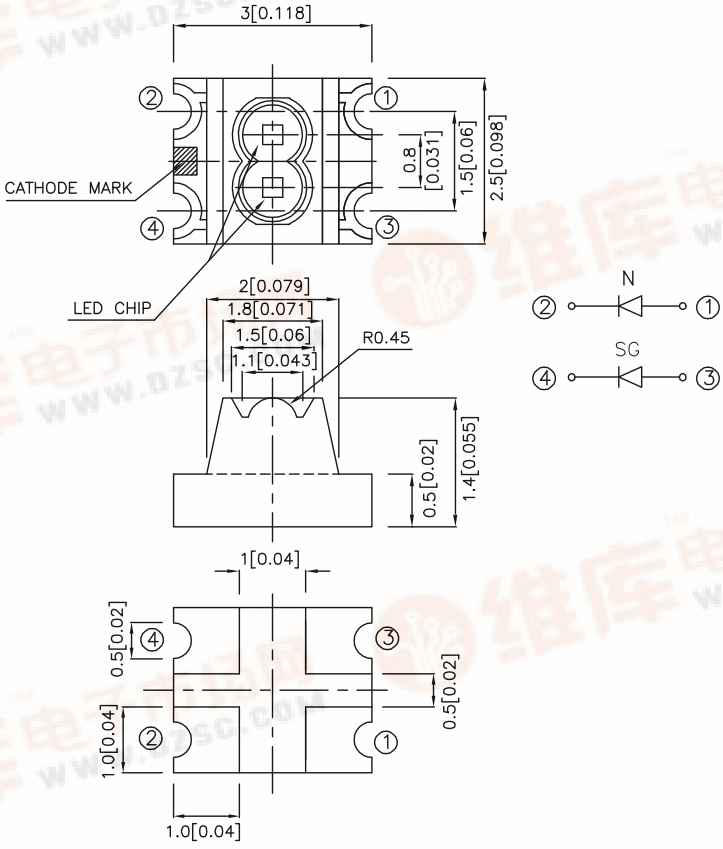
- ●3.0mmx2.5mm SMT LED, 1.4mm THICKNESS.
- ●LOW POWER CONSUMPTION.
- ●WIDE VIEWING ANGLE.
- ●IDEAL FOR BACK LIGHT AND INDICATOR.
- ●VARIOUS COLORS AND LENS TYPES AVAILABLE.
- ●INNER LENS TYPE
- ●PACKAGE : 2000PCS / REEL.
- ●RoHS COMPLIANT.

Description

The Pure Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Pure Orange Light Emitting Diode.

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

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APBL3025NSGC-F01	PURE ORANGE (GaAsP/GaP)	WATER CLEAR	7	20	100°
	SUPER BRIGHT GREEN (GaP)		7	20	

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

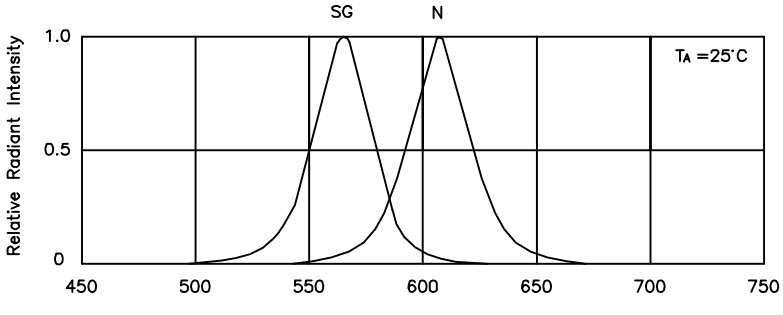
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Pure Orange Super Bright Green	607 565		nm	I_F=20mA
λD	Dominant Wavelength	Pure Orange Super Bright Green	610 568		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Pure Orange Super Bright Green	35 30		nm	I_F=20mA
C	Capacitance	Pure Orange Super Bright Green	15 15		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Pure Orange Super Bright Green	2.05 2.2	2.5 2.5	V	I_F=20mA
I_R	Reverse Current	All		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

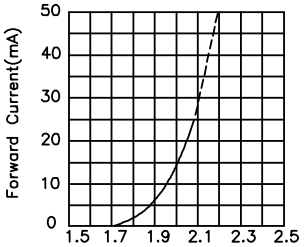
Parameter	Pure Orange	Super Bright Green	Units
Power dissipation	105	105	mW
DC Forward Current	25	25	mA
Peak Forward Current [1]	145	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		

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

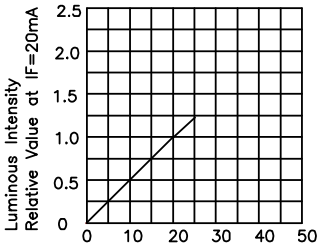


RELATIVE INTENSITY Vs. WAVELENGTH

APBL3025NSGC-F01
Pure Orange

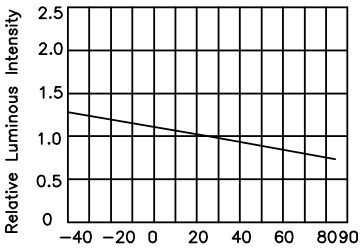


FORWARD CURRENT Vs.
FORWARD VOLTAGE

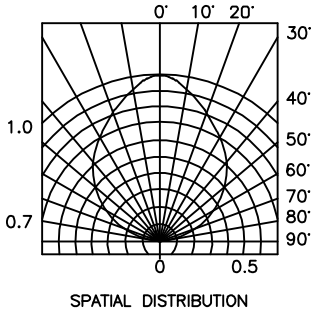


LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

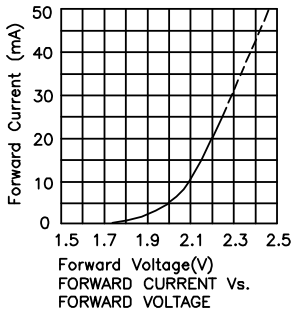


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

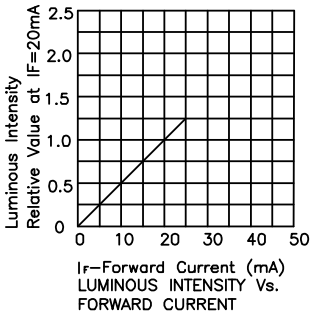


SPATIAL DISTRIBUTION

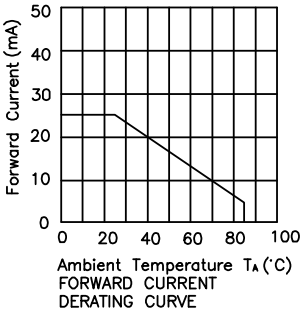
Super Bright Green



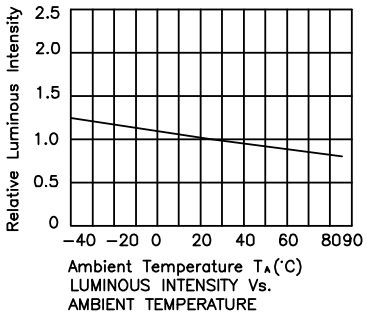
FORWARD CURRENT Vs.
FORWARD VOLTAGE



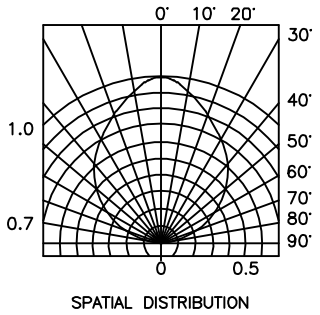
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



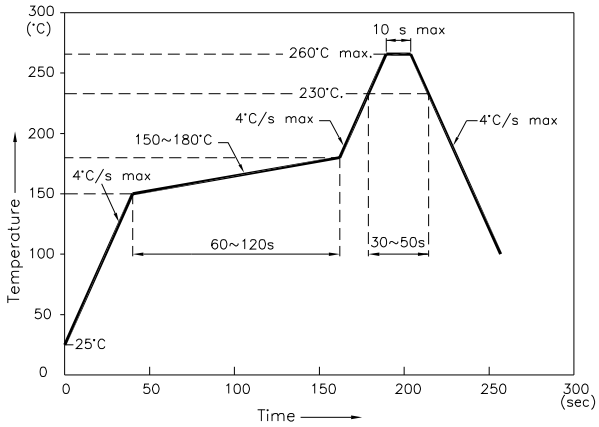
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

APBL3025NSGC-F01

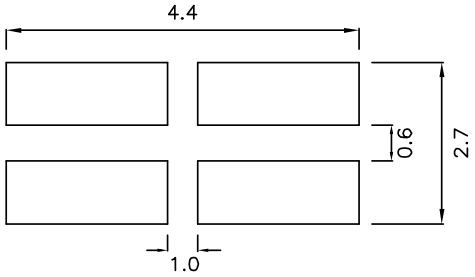
Reflow Soldering Profile For Lead-free SMT Process.



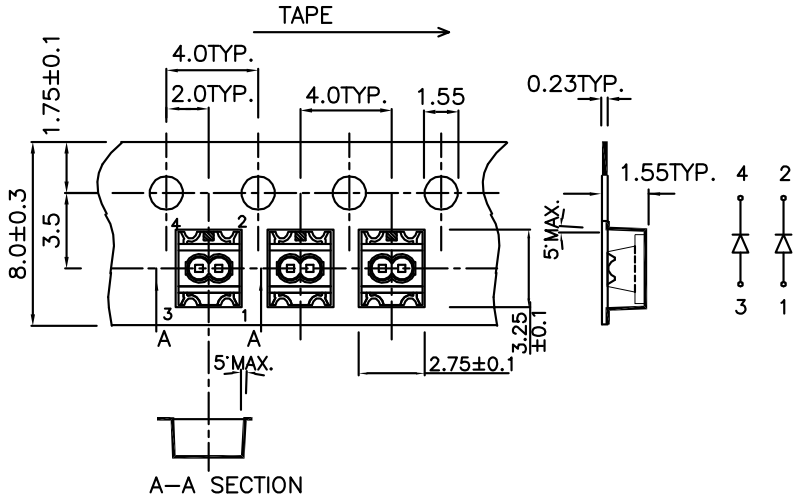
NOTES:

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.

Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)



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.