

Part Number: APTB1612LSYKCGKC

Super Bright Yellow
Green

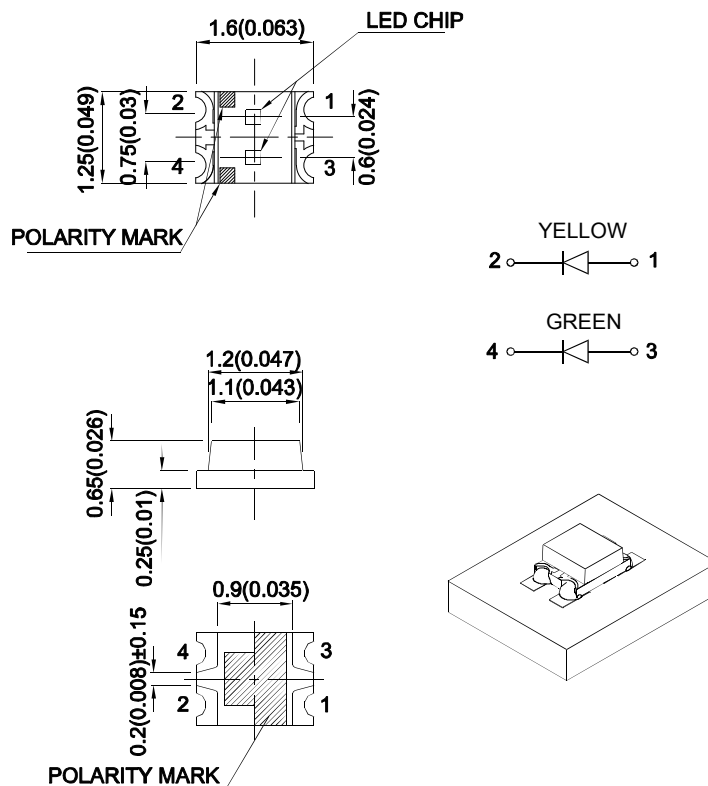
Features

- 1.6mmx1.25mm SMD LED, 0.65mm thickness.
- Bi-color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Descriptions

- The Super Bright Yellow 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



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APT B1612LSYKCGKC	Super Bright Yellow (AlGaInP)	Water Clear	4	10	120°
	Green (AlGaInP)		1.2	3	

Notes:

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

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Min.	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Yellow Green		590 574		nm	I _F =2mA
λ_D [1]	Dominant Wavelength	Super Bright Yellow Green		590 570		nm	I _F =2mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow Green		20 20		nm	I _F =2mA
C	Capacitance	Super Bright Yellow Green		20 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Yellow Green	1.5 1.5	1.85 1.9	2.1 2.1	V	I _F =2mA
I _R	Reverse Current	Super Bright Yellow Green			10 10	uA	V _R = 5V

Notes:

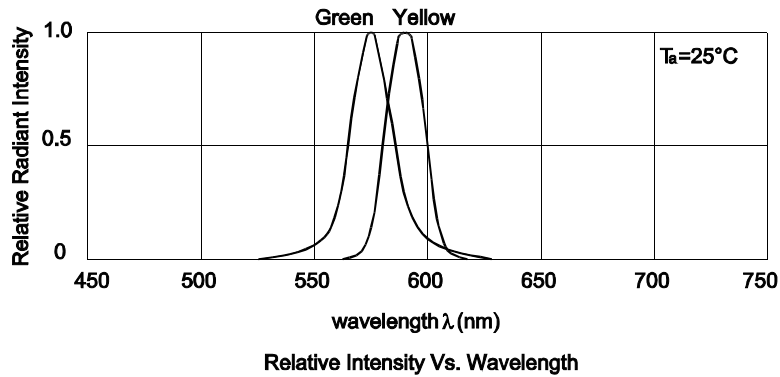
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

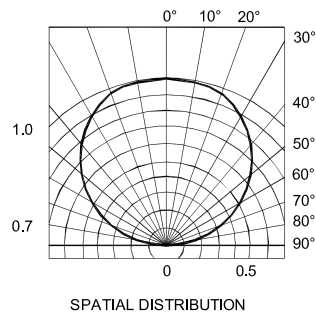
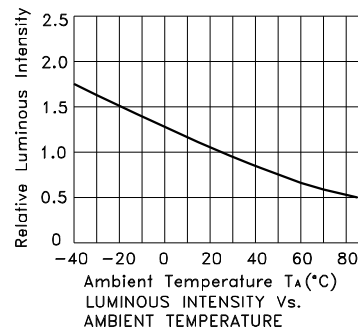
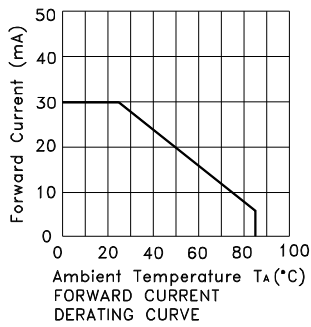
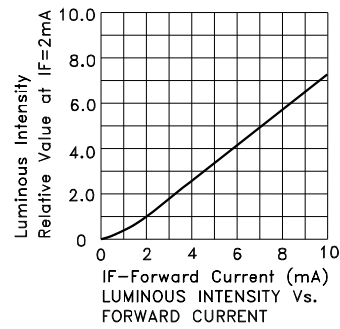
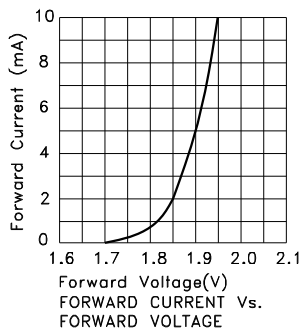
Parameter	Super Bright Yellow	Green	Units
Power dissipation	63	63	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	175	150	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

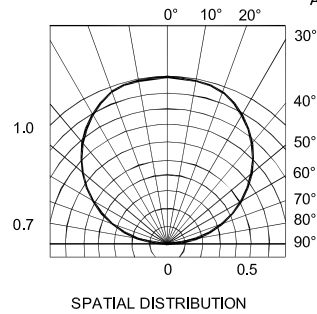
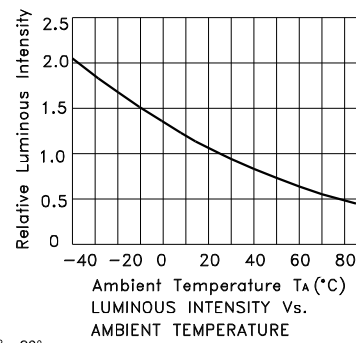
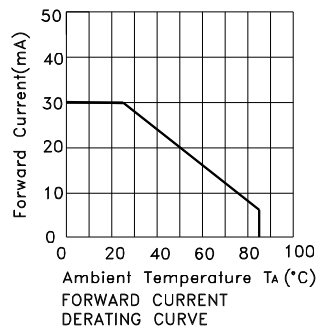
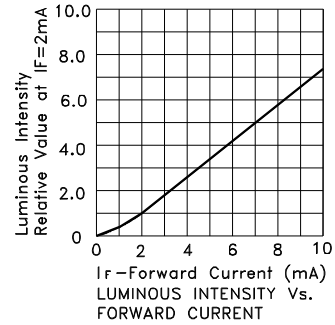
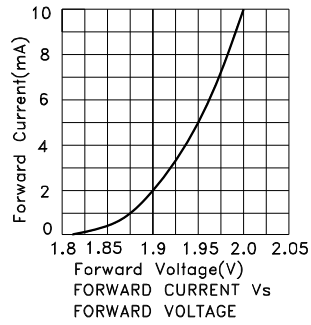
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



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Super Bright Yellow



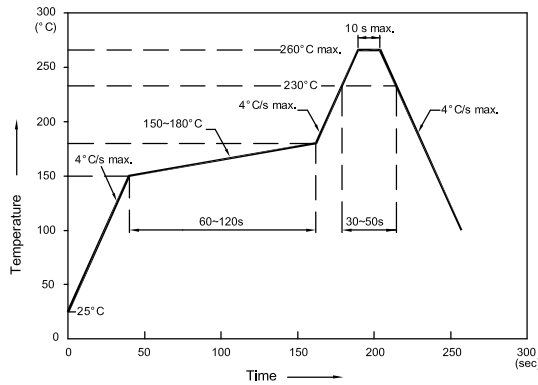
Green



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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.

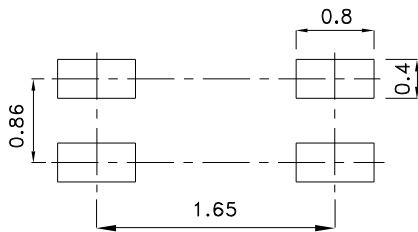
Reflow Soldering Profile For Lead-free SMT Process.



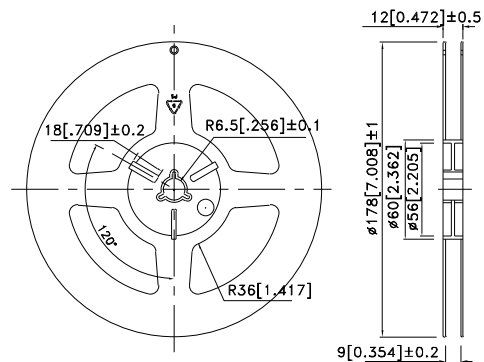
NOTES:

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.

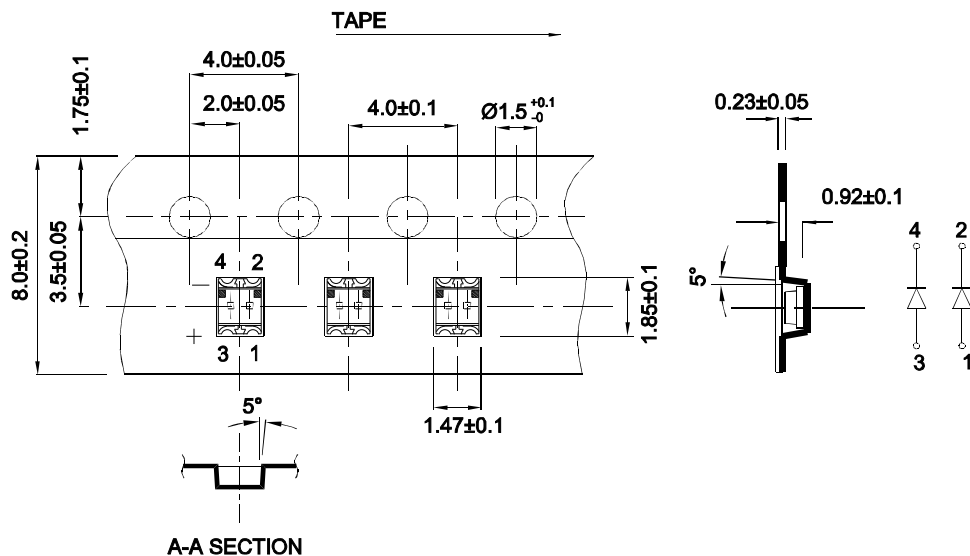
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

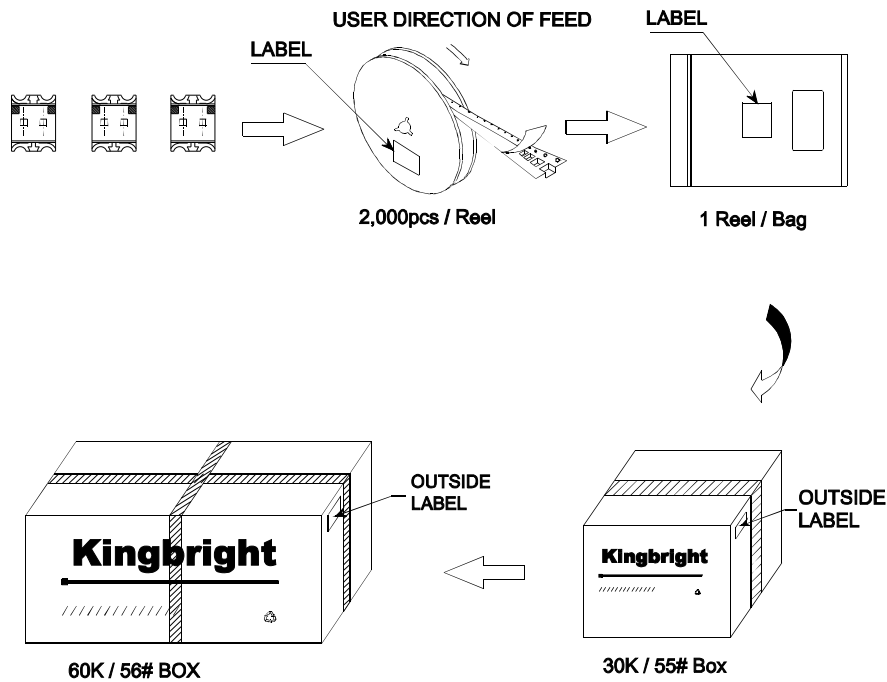


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APTB1612LSYKCGKC



<h1>Kingbright</h1>				
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Q.C.				
xxxxxxx				
PASSED				
CODE: XXX				
LOT NO:				
RoHS Compliant				

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