

Part Number: APTB1612SEKCGKC

Super Bright Orange
Green

Features

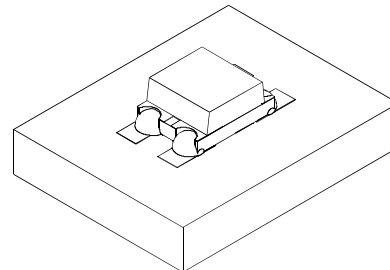
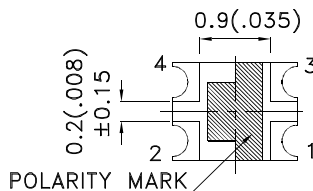
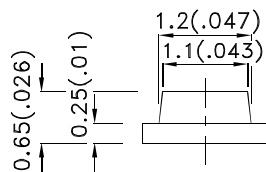
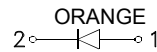
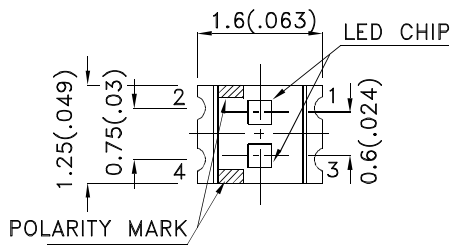
- 1.6mmx1.25mm SMT LED, 0.65mm thickness.
- Bi-color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

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



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.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	θ1/2
APTB1612SEKCGKC	Super Bright Orange (AlGaInP)	WATER CLEAR	70	240	120°
	Green (AlGaInP)		18	50	

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%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Orange Green	610 574		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Super Bright Orange Green	601 570		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Orange Green	29 20		nm	I _F =20mA
C	Capacitance	Super Bright Orange Green	15 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Orange Green	2.1 2.1	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Orange Green		10 10	uA	V _R = 5V

Notes:

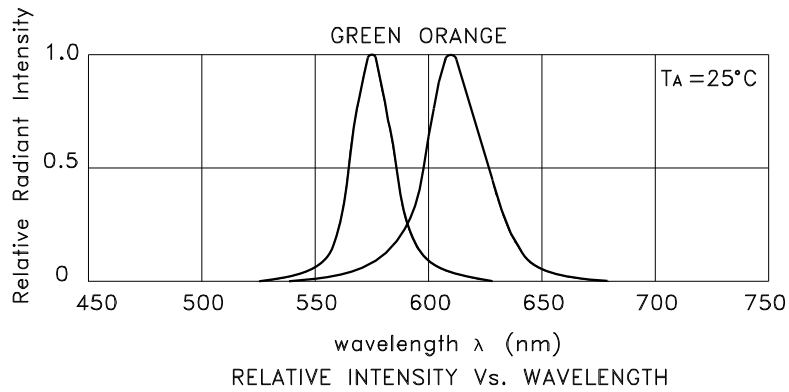
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

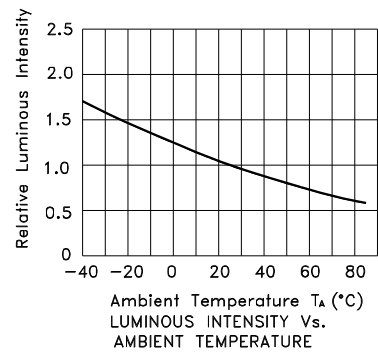
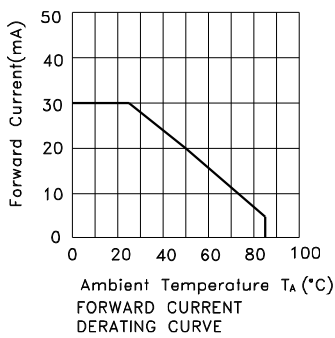
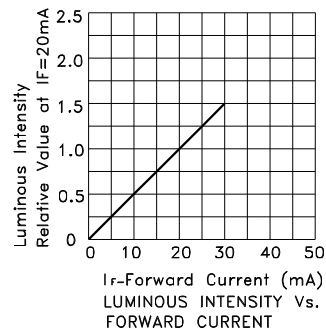
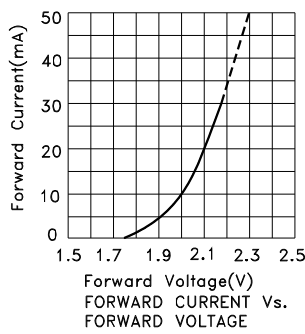
Parameter	Super Bright Orange	Green	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	195	150	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

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

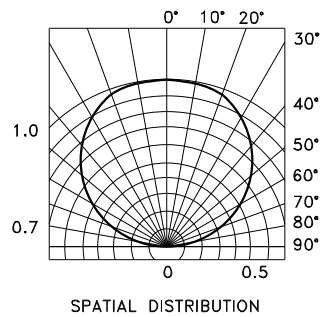
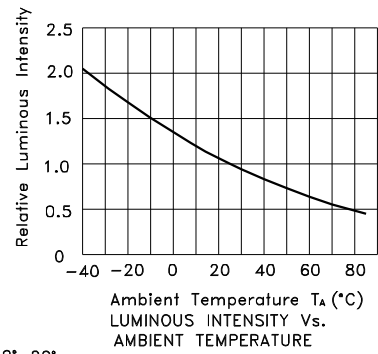
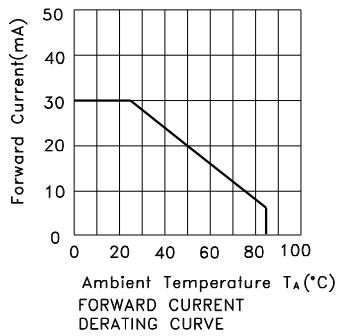
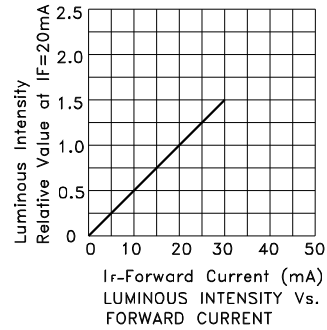


APTB1612SEKCGKC Super Bright Orange



Kingbright

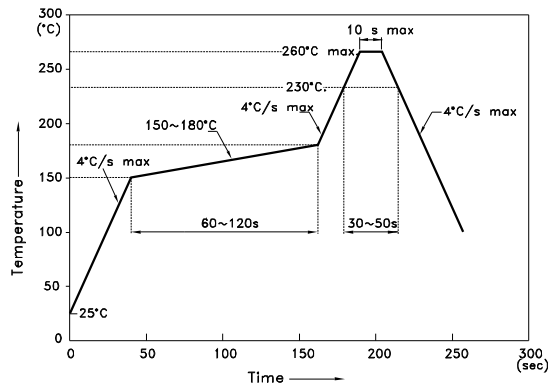
Green



APTB1612SEKCGKC

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.

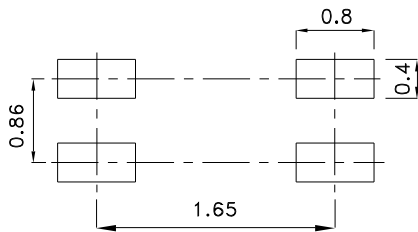
Reflow Soldering Profile For Lead-free SMT Process.



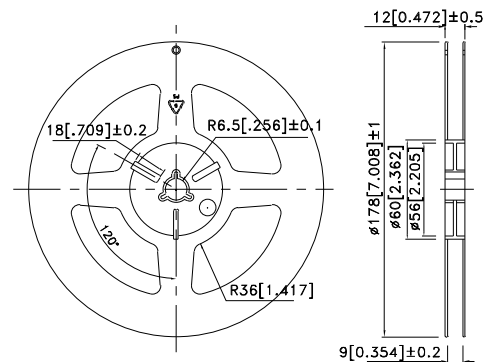
NOTES:

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.

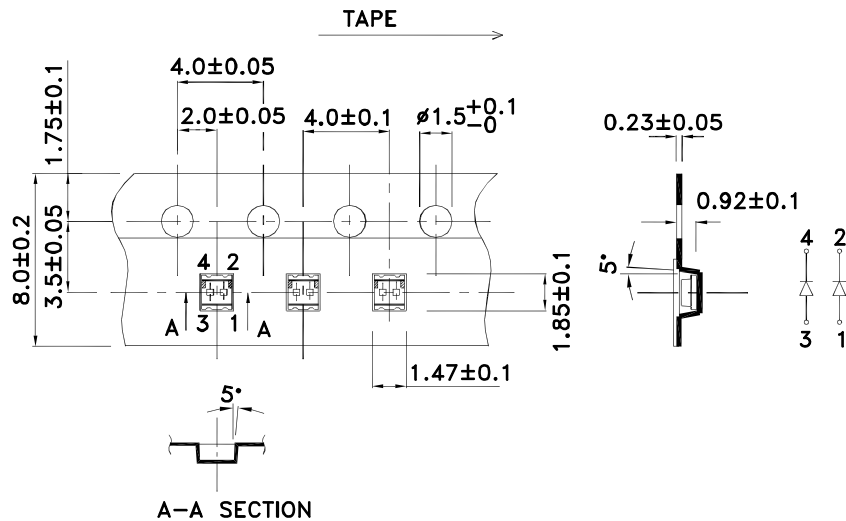
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

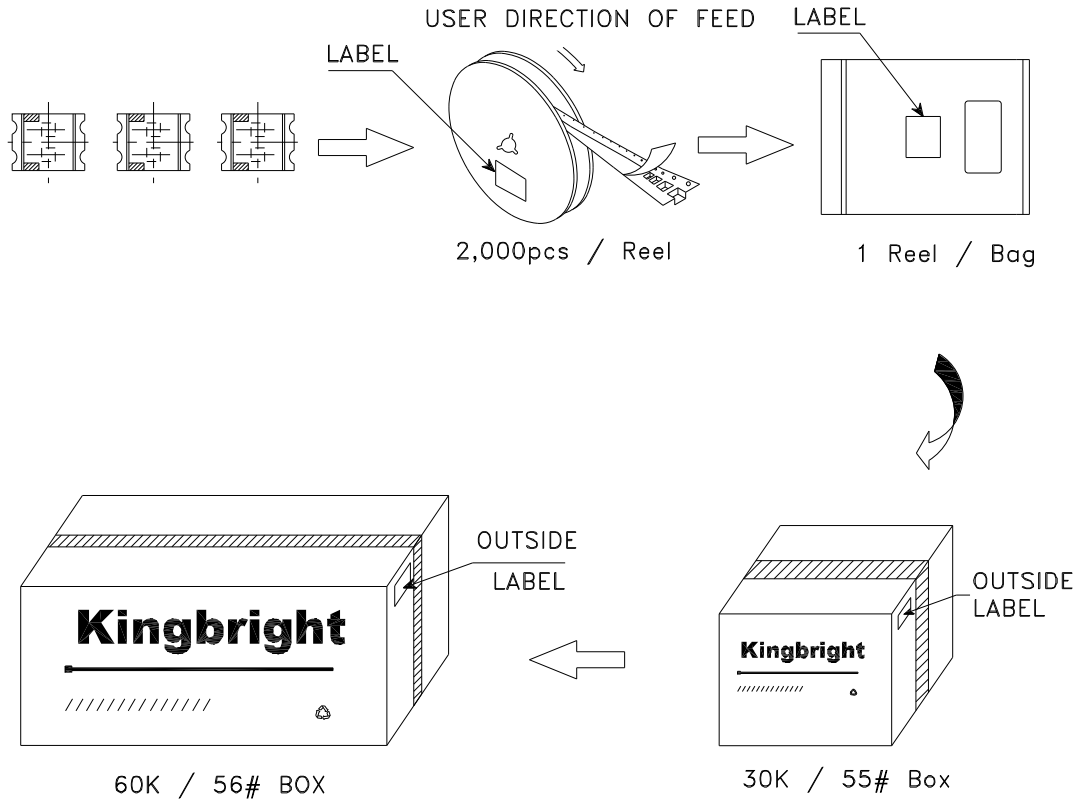


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APTB1612SEKCGKC



<h2 style="margin: 0;">Kingbright</h2>	
P/NO: APTB1612xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	