



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: APTB1612LVBDZGKC

Blue
Green

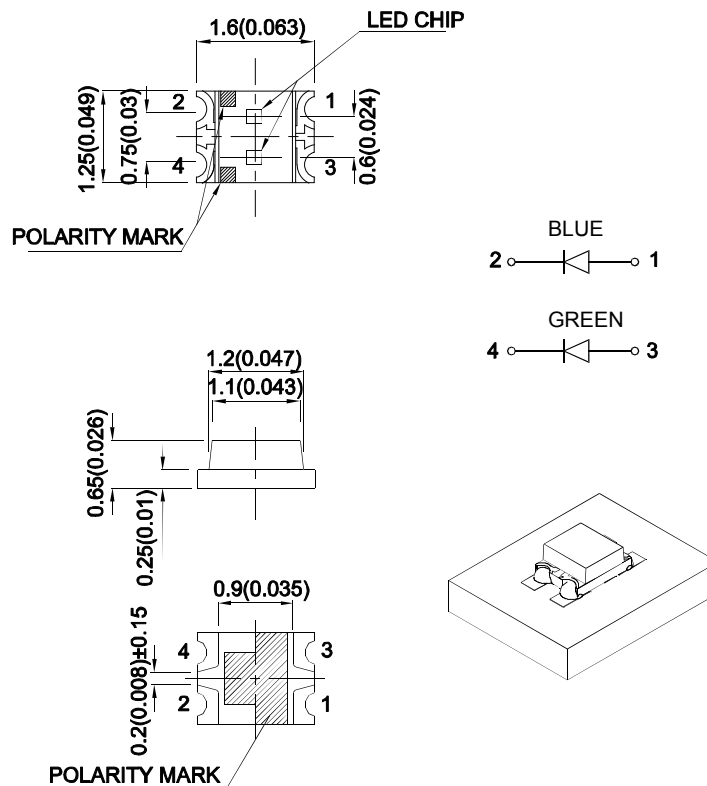
Features

- 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 Blue source color devices are made with InGaN Light Emitting Diode.
- The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

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 B1612LVBDZGKC	Blue (InGaN)	Water Clear	10	20	120°
	Green (InGaN)		30	50	

Notes:

1. θ1/2 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	Blue Green		465 515		nm	I _F =2mA
λ _D [1]	Dominant Wavelength	Blue Green		470 525		nm	I _F =2mA
Δλ _{1/2}	Spectral Line Half-width	Blue Green		22 35		nm	I _F =2mA
C	Capacitance	Blue Green		100 45		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue Green	2.2 2.2	2.65 2.65	3 3.1	V	I _F =2mA
I _R	Reverse Current	Blue Green			50 50	uA	V _R = 5V

Notes:

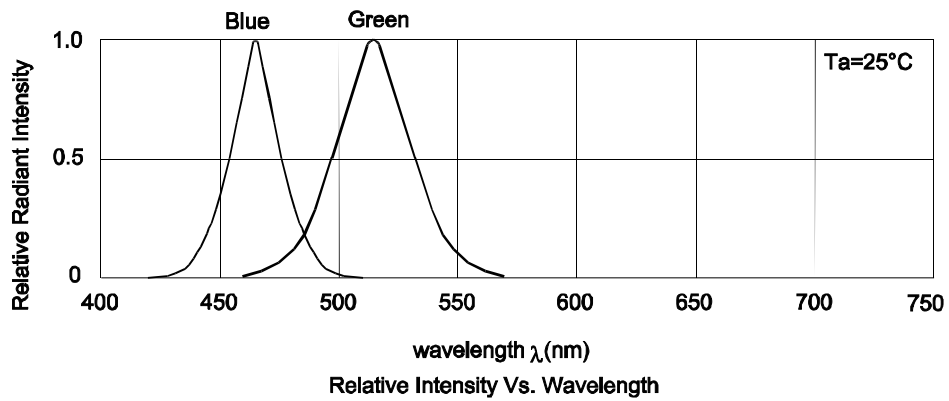
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

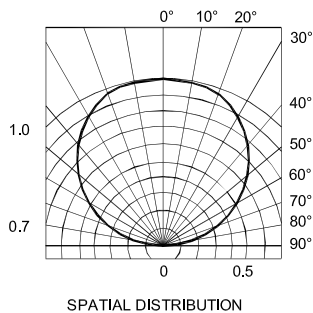
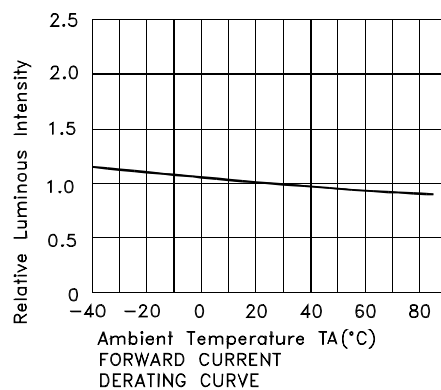
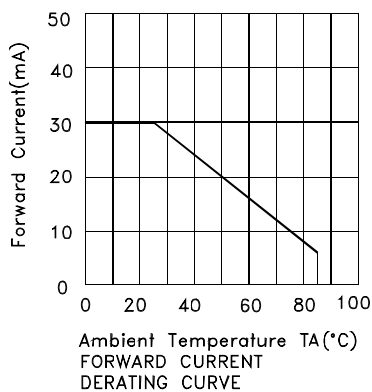
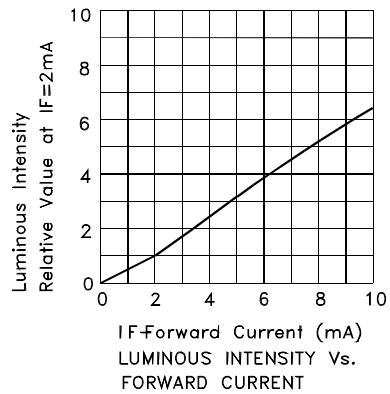
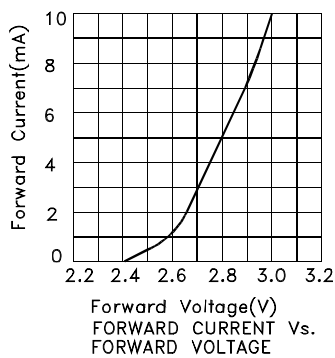
Parameter	Blue	Green	Units
Power dissipation	90	77.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	100	150	mA
Electrostatic Discharge Threshold (HBM)	250	450	V
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

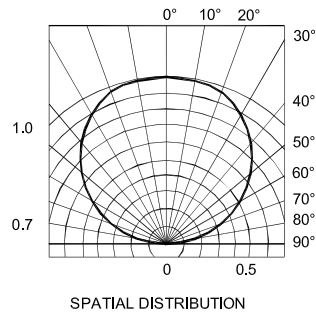
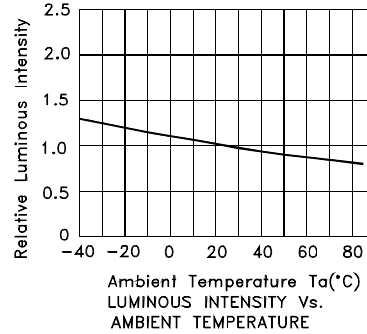
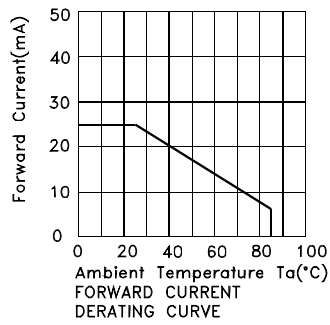
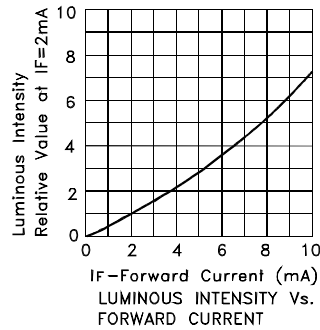
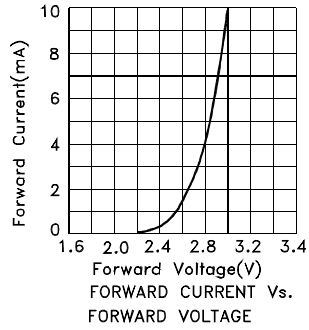
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APTB1612LVBDZGKC
Blue

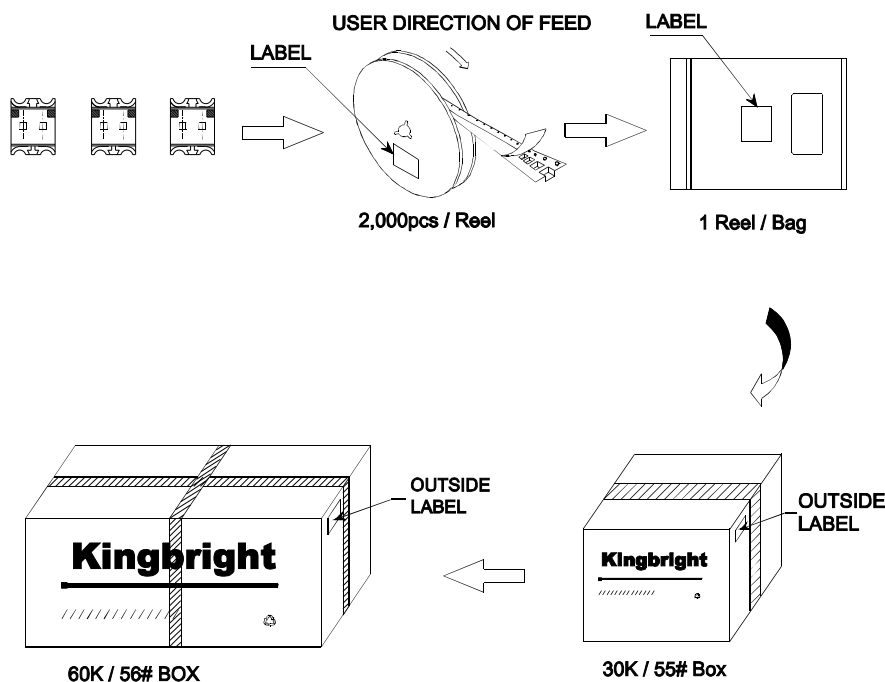


Green



PACKING & LABEL SPECIFICATIONS

APTB1612LVBDZGKC



Kingbright				
P/NO: APTB1612xxx				
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CODE: XXX				
LOT NO:				
RoHS Compliant				

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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
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Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru