

P/N: KPTB-1615YSGC

YELLOW
SUPER BRIGHT GREEN

Features

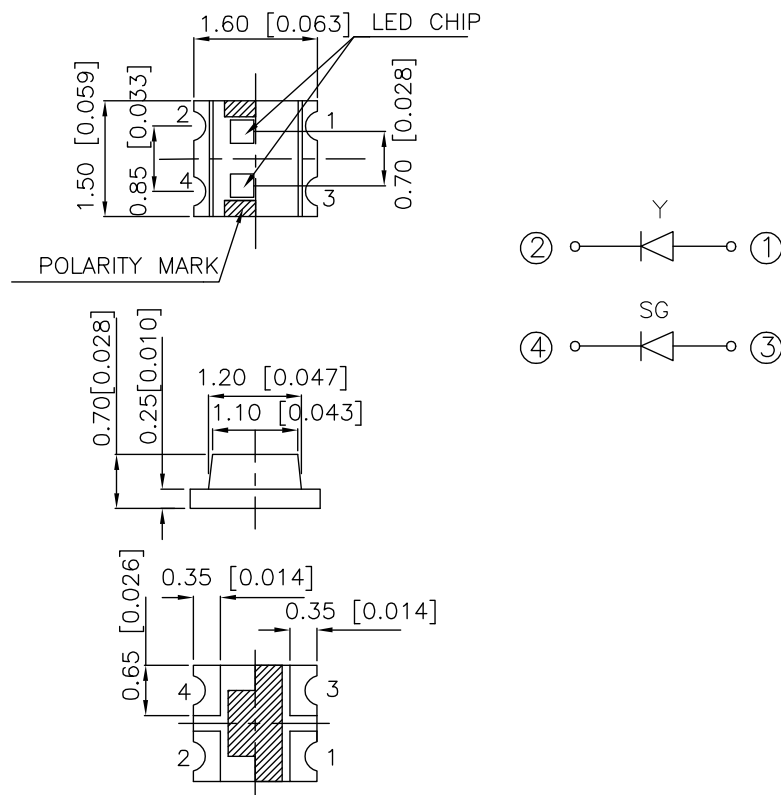
- 1.6mmx1.5mm SMT LED, 0.7mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT

Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow 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 $\pm 0.2(0.008)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
KPTB-1615YSGC	YELLOW (GaAsP/GaP)	WATER CLEAR	2.6	8	120°
	SUPER BRIGHT GREEN (GaP)		4	12	

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

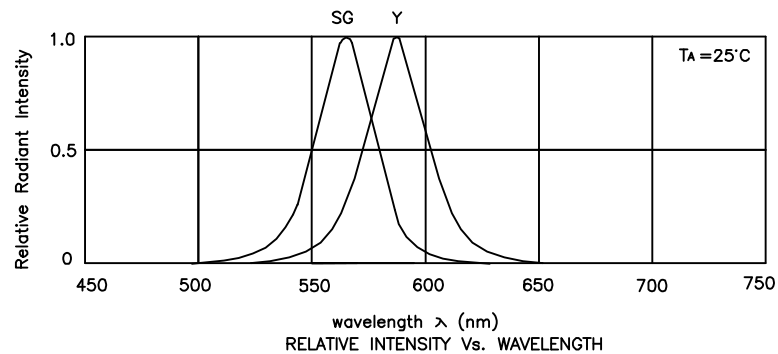
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Yellow Super Bright Green	590 565		nm	IF=20mA
λ_D	Dominant Wavelength	Yellow Super Bright Green	588 568		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Yellow Super Bright Green	35 30		nm	IF=20mA
C	Capacitance	Yellow Super Bright Green	20 15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Yellow Super Bright Green	2.1 2.2	2.5 2.5	V	IF=20mA
IR	Reverse Current	Yellow Super Bright Green		10 10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

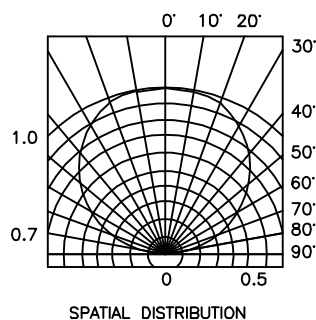
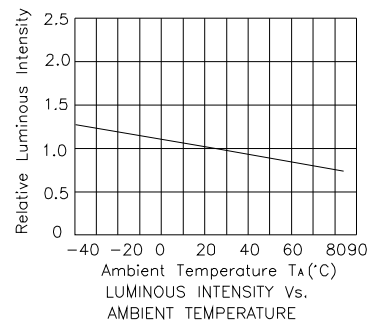
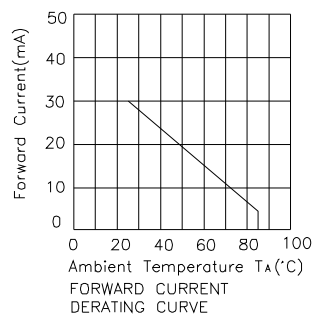
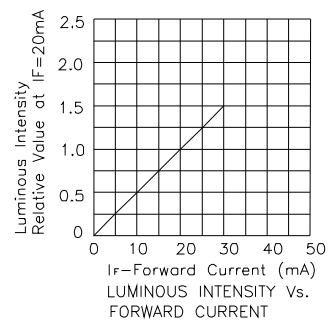
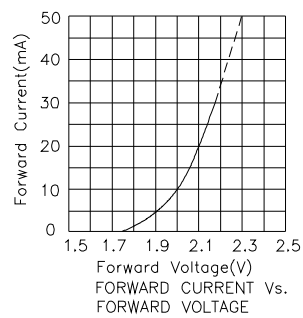
Parameter	Yellow	Super Bright Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	140	140	mA
Reverse Voltage	5		V
Operating/storage Temperature	-40°C To +85°C		

Note:

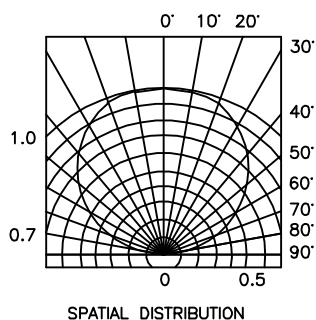
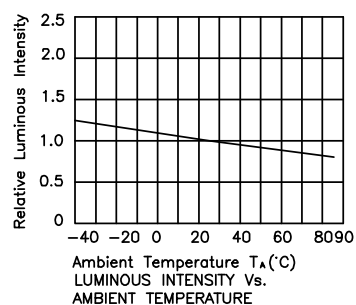
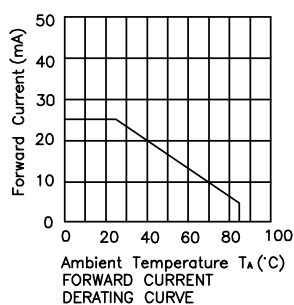
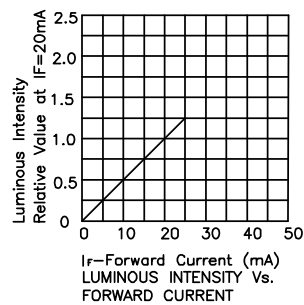
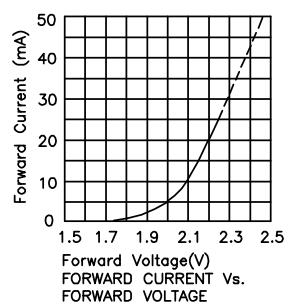
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



KPTB-1615YSGC Yellow

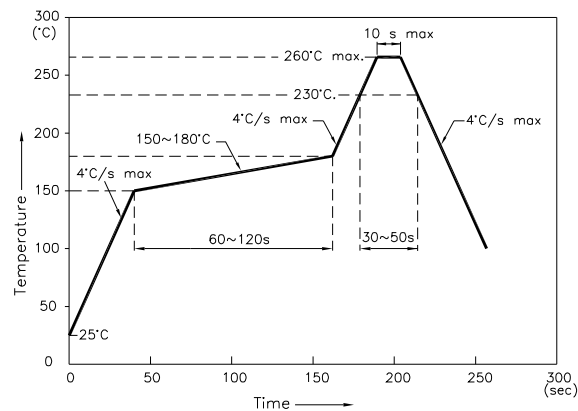


Super Bright Green



KPTB-1615YSGC

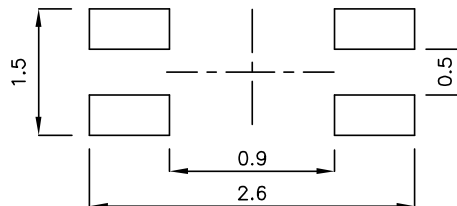
Reflow Soldering Profile For Lead-free SMT Process.



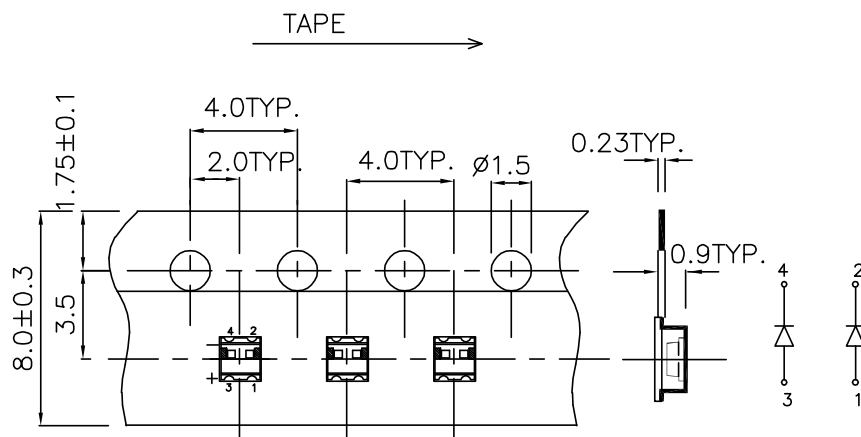
NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity/ Luminous Flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.