

KPBD-3224SYKCGKC

SUPER BRIGHT YELLOW
GREEN

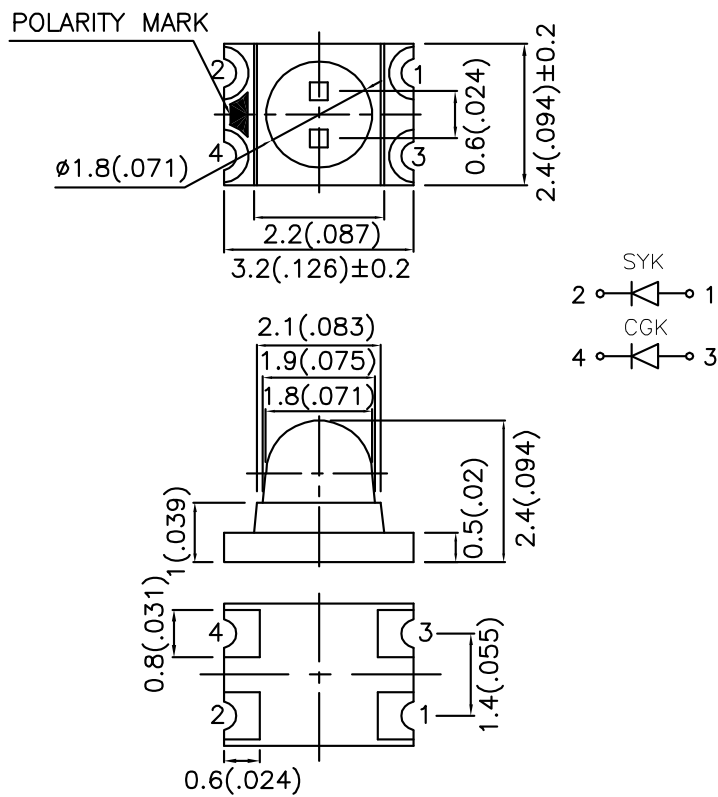
Features

- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / REEL.
- RoHS COMPLIANT.

Description

The Super Bright Yellow source color devices are made with DH InGaAIP on GaAs substrate Light Emitting Diode. The Green source color devices are made with InGaAIP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1 (0.004)$ 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
KPBD-3224SYKCGKC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	36	150	20°
	GREEN (InGaAlP)		18	120	

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

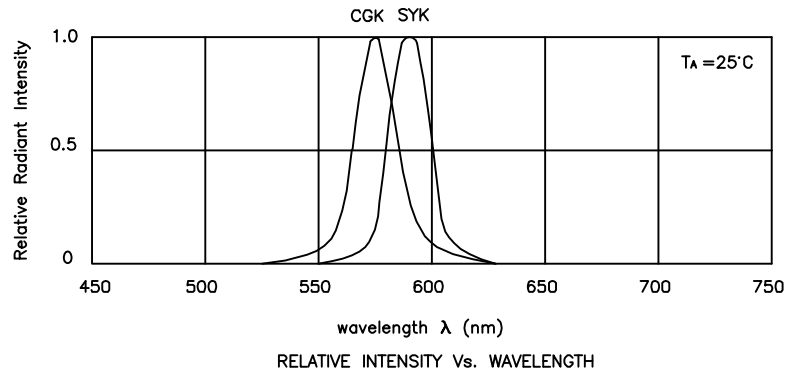
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Yellow Green	590 574		nm	IF=20mA
λ_D	Dominant Wavelength	Super Bright Yellow Green	590 570		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow Green	20 20		nm	IF=20mA
C	Capacitance	Super Bright Yellow Green	20 15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Yellow Green	2.0 2.1	2.5 2.5	V	IF=20mA
IR	Reverse Current	Super Bright Yellow Green		10 10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

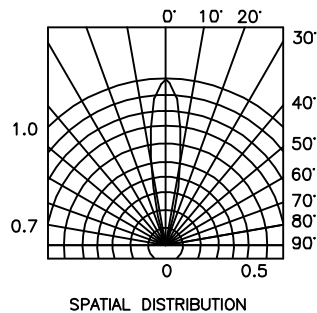
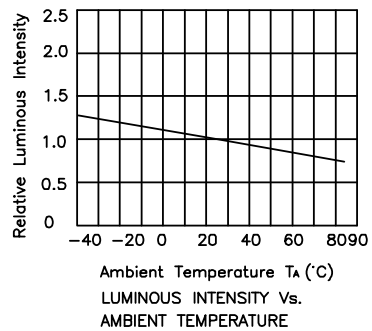
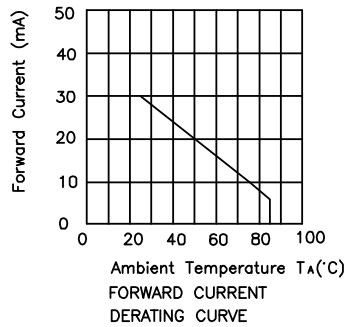
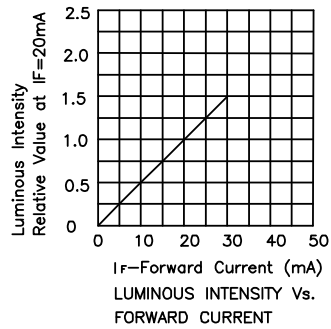
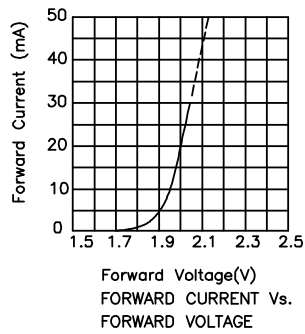
Parameter	Super Bright Yellow	Green	Units
Power dissipation	125	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	175	150	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		

Note:

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

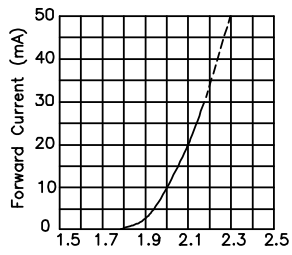


KPBD-3224SYKCGKC Super Bright Yellow

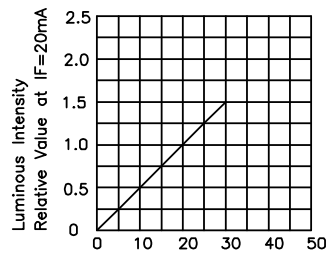


Kingbright

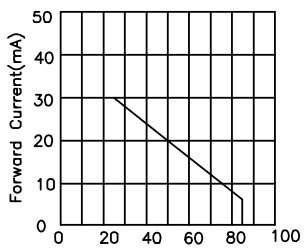
Green



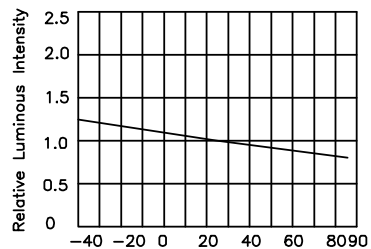
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



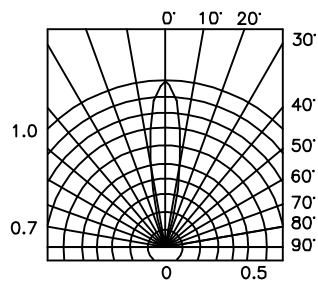
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature Ta (°C)
FORWARD CURRENT
DERATING CURVE



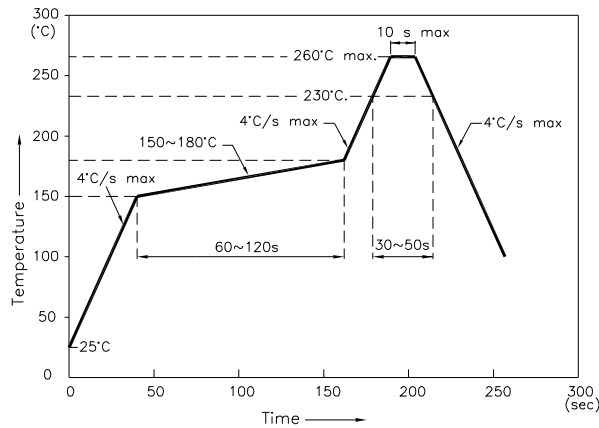
Ambient Temperature Ta (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

KPBD-3224SYKCGKC

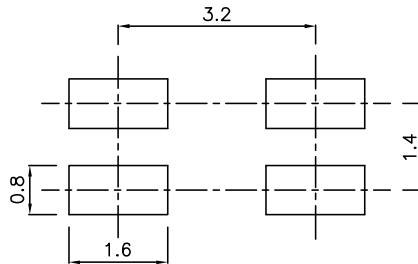
Reflow Soldering Profile For Lead-free SMT Process.



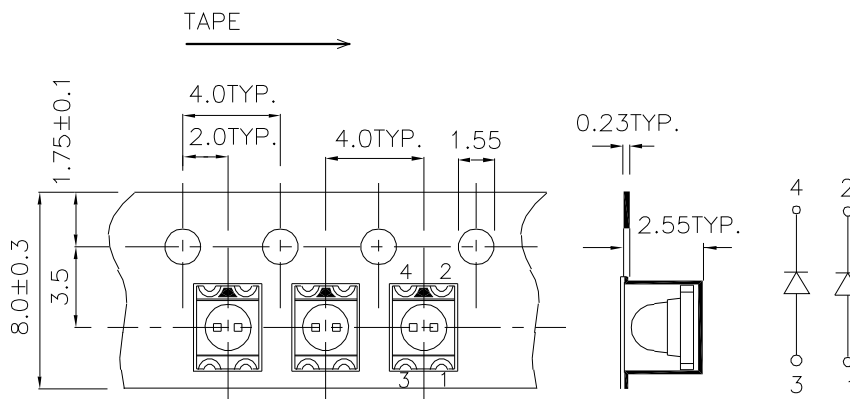
NOTES:

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/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous intensity/ luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.