

Part Number: APBD3224SURKSGC-F01

Hyper Red
Super Bright Green

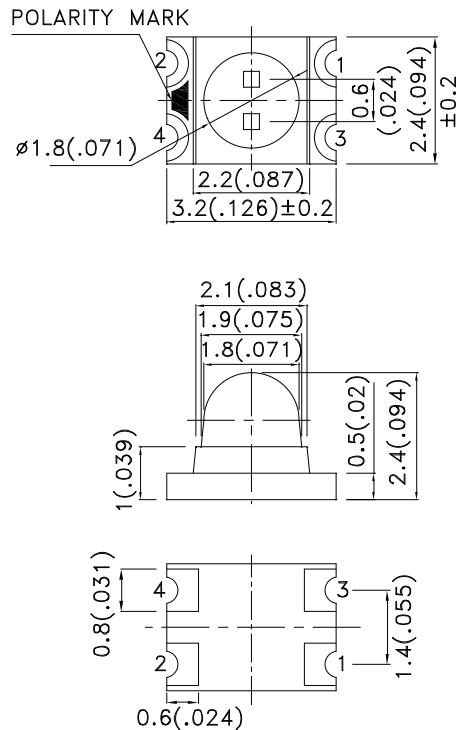
Features

- 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.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

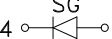
Description

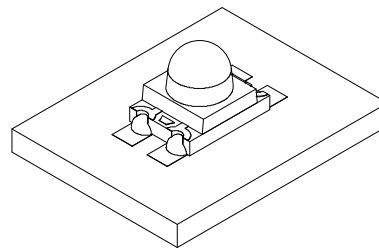
The Hyper Red source color devices are made with InGaAlP on GaAs substrate Light Emitting Diode. The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



HYPER RED
SURK
2  1

SUPER BRIGHT GREEN
SG
4  3



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Specifications are subject to change without 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.	2θ1/2
APBD3224SURKSGC-F01	Hyper Red (InGaAlP)	WATER CLEAR	380	800	20°
	Super Bright Green (GaP)		18	60	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red Super Bright Green	650 565		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Hyper Red Super Bright Green	635 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red Super Bright Green	28 30		nm	I _F =20mA
C	Capacitance	Hyper Red Super Bright Green	35 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Hyper Red Super Bright Green	1.95 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Hyper Red Super Bright Green		10 10	uA	V _R = 5V

Notes:

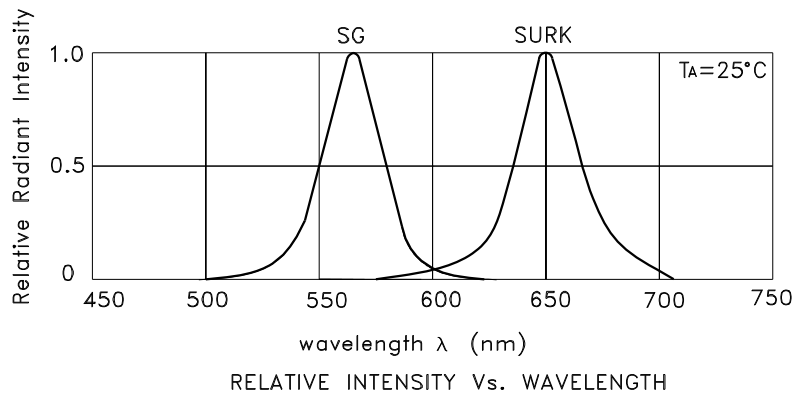
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

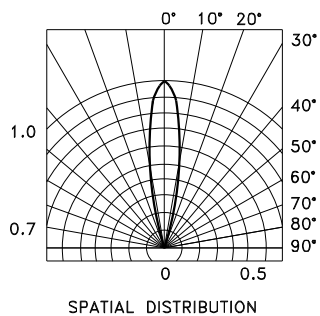
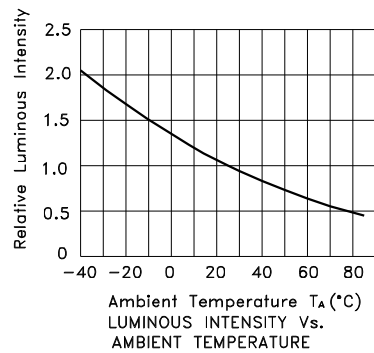
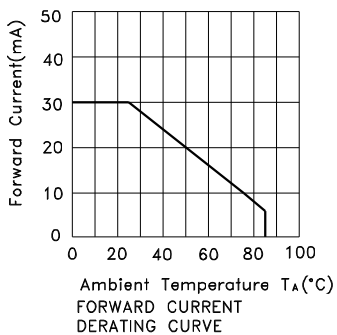
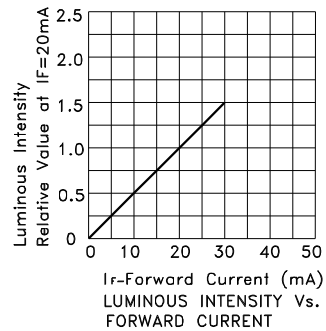
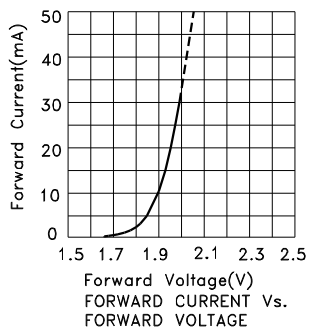
Parameter	Hyper Red	Super Bright Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	185	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

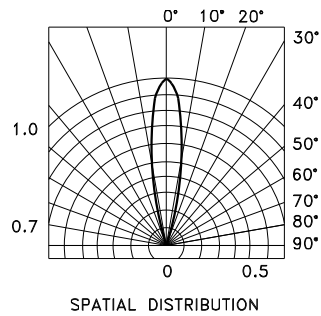
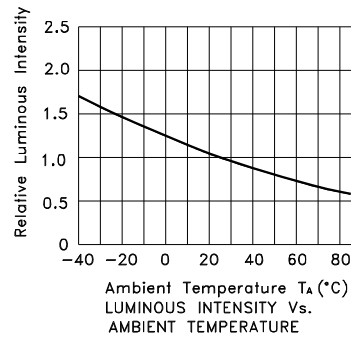
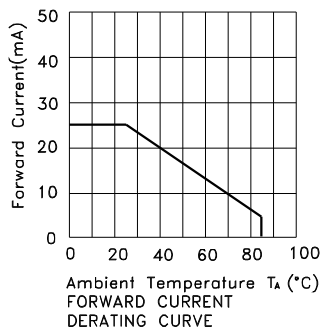
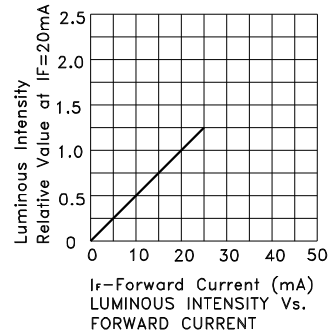
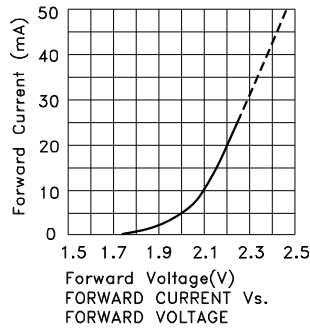
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APBD3224SURKSGC-F01
Hyper Red

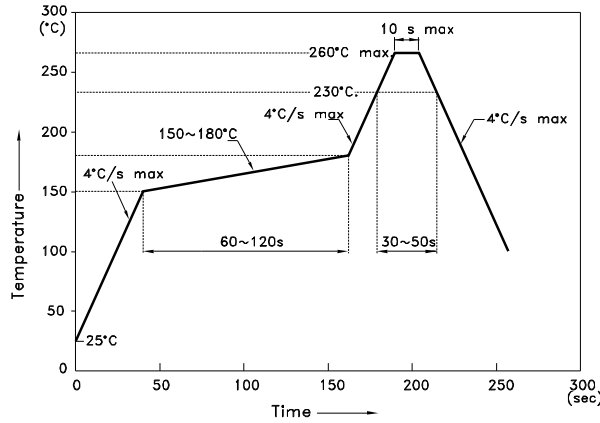


Super Bright Green



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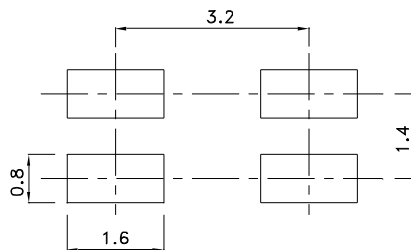
Reflow Soldering Profile For Lead-free SMT Process.



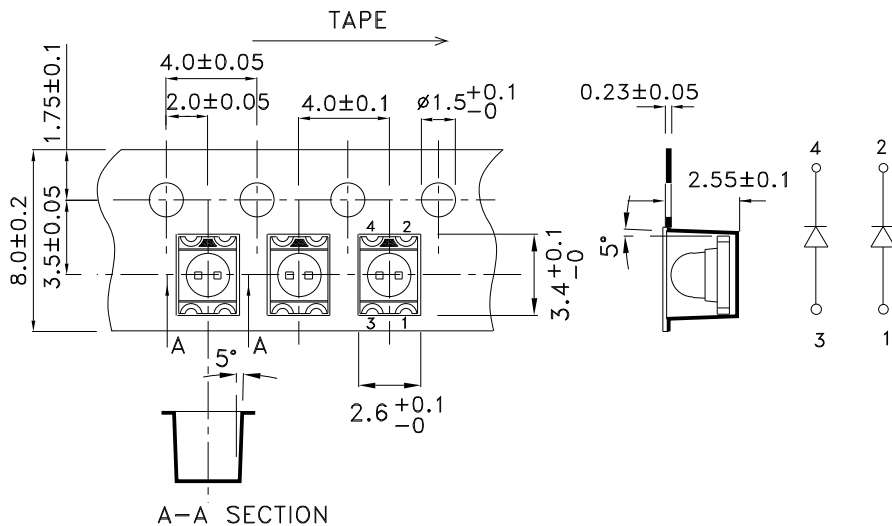
NOTES:

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)



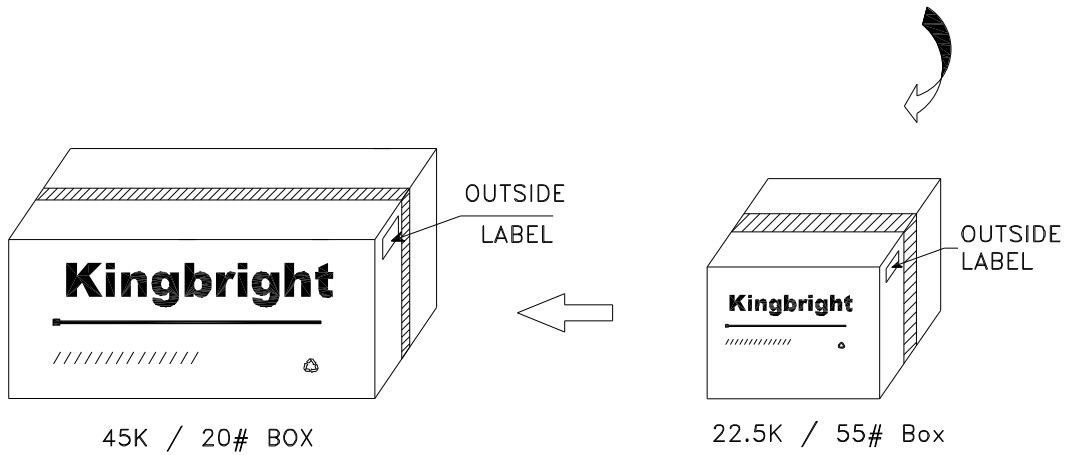
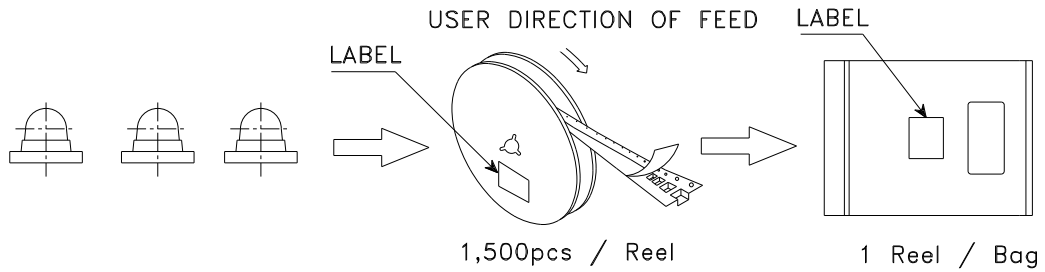
Tape Specifications (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

APBD3224SURKSGC-F01



<h1>Kingbright</h1>	
P/NO: APBD3224xxx	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	