

APKB3025SURKMGK-F01

HYPER RED  
MEGA GREEN

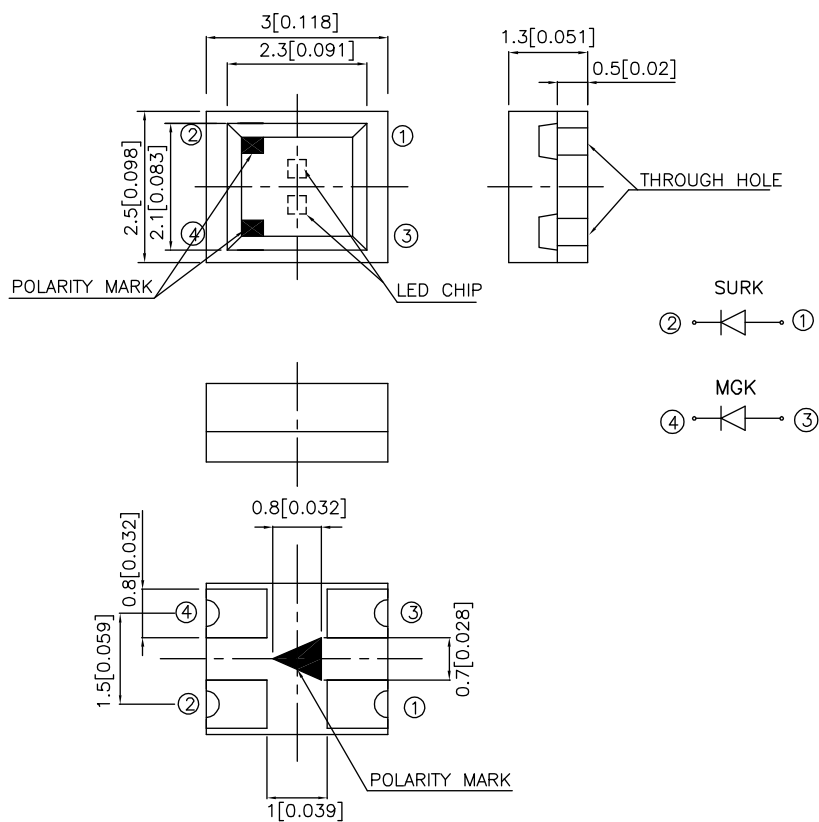
### Features

- 3.0mmx2.5mm SMT LED, 1.3mm THICKNESS.
- BI -COLOR, LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

### Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.  
The Mega Green source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.0079") 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
APKB3025SURKMGK-F01	HYPER RED (InGaAlP)	WATER CLEAR	70	150	120°
	MEGA GREEN (InGaAlP)		10	50	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25°C

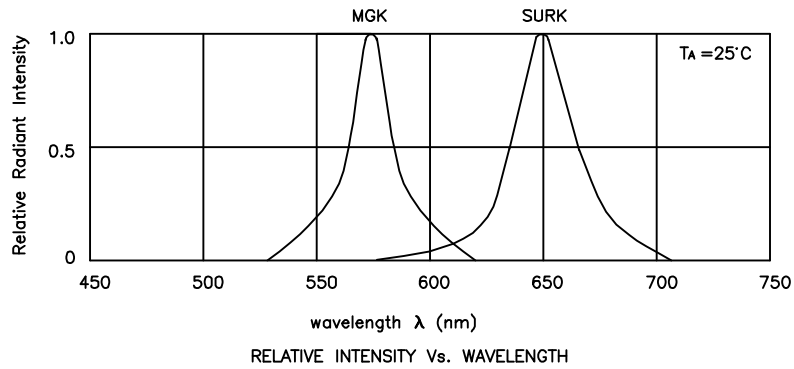
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red Mega Green	650 574		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Hyper Red Mega Green	635 570		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Hyper Red Mega Green	28 20		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red Mega Green	35 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Hyper Red Mega Green	1.95 2.1	2.5 2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at TA=25°C

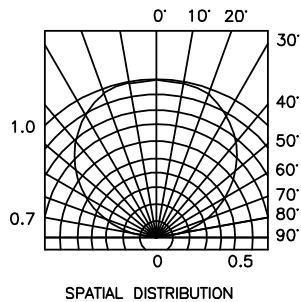
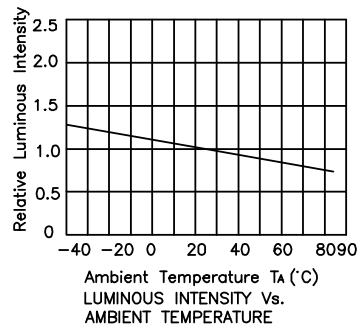
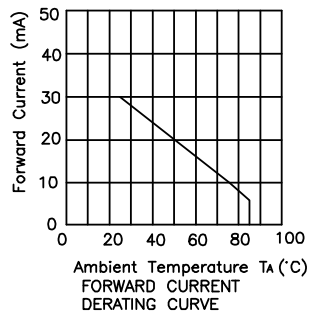
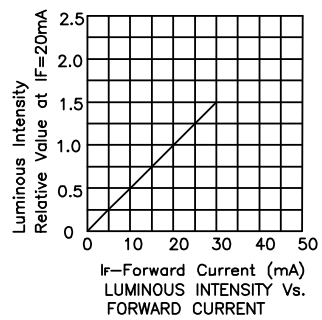
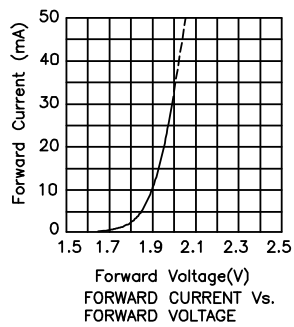
Parameter	Hyper Red	Mega Green	Units
Power dissipation	170	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	185	150	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		

Note:

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

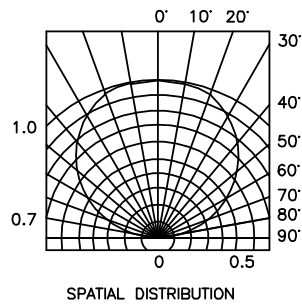
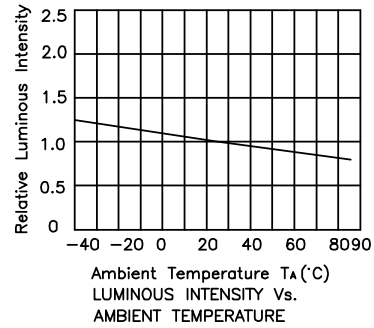
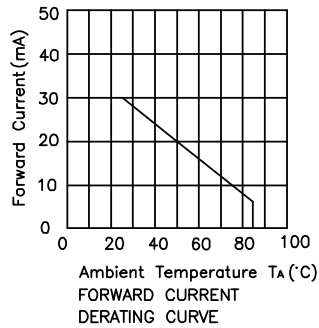
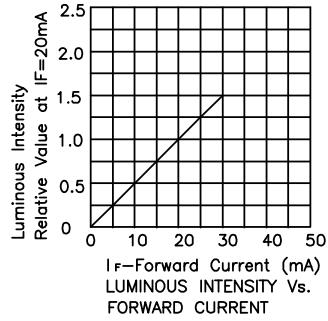
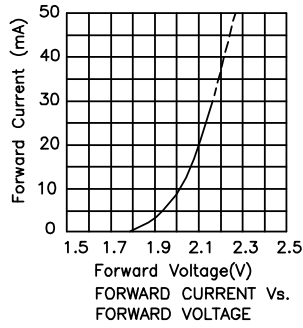


## APKB3025SURKMGK-F01 Hyper Red



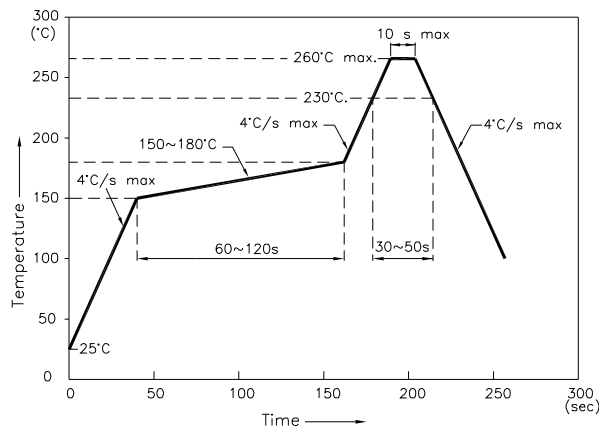
# Kingbright

## Mega Green



## APKB3025SURKMGK-F01

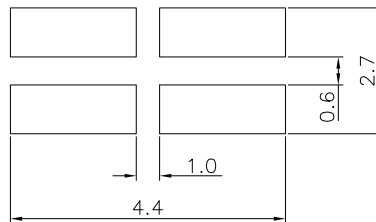
Reflow Soldering Profile For Lead-free SMT Process.



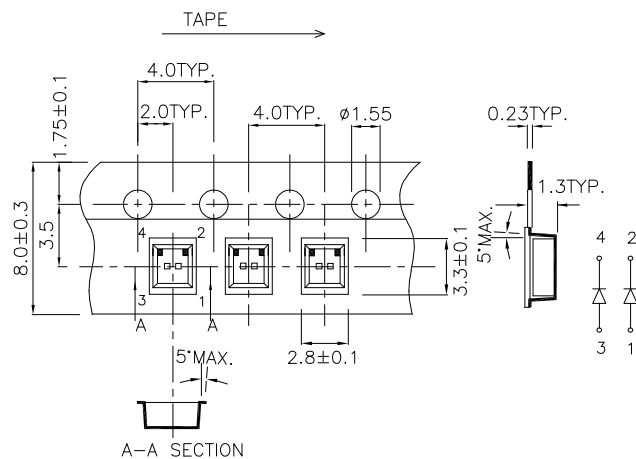
**NOTES:**

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

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

Note: Accuracy may depend on the sorting parameters.