

KPBA-3010ESGC-F01

HIGH EFFICIENCY RED  
SUPER BRIGHT GREEN

### Features

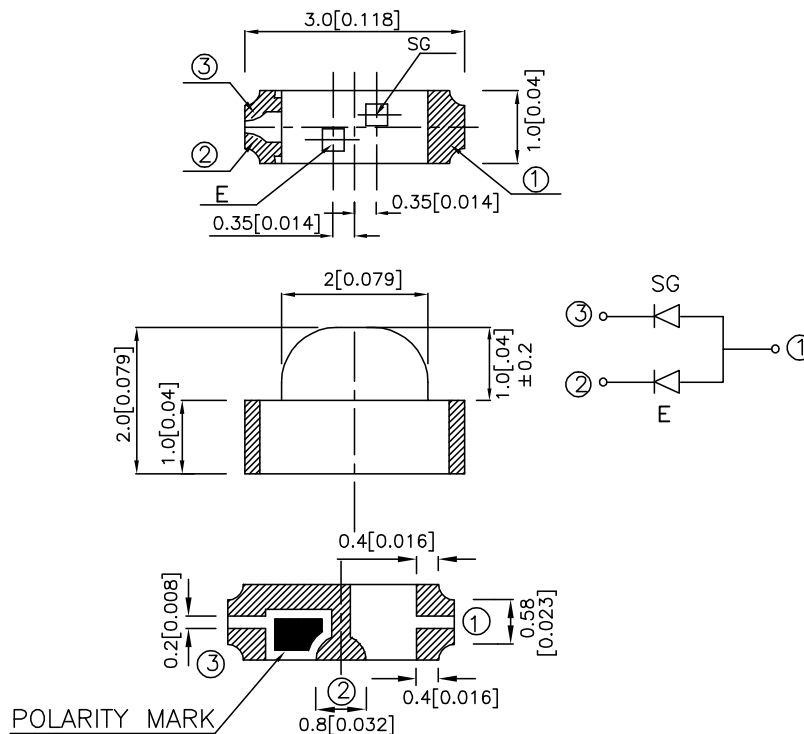
- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLRS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- LEAD AND CADMIUM FREE.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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  $\pm 0.15$  (0.006") 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.	θ1/2
KPBA-3010ESGC-F01	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	4	12	140°
	SUPER BRIGHT GREEN (GaP)		2.6	12	

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

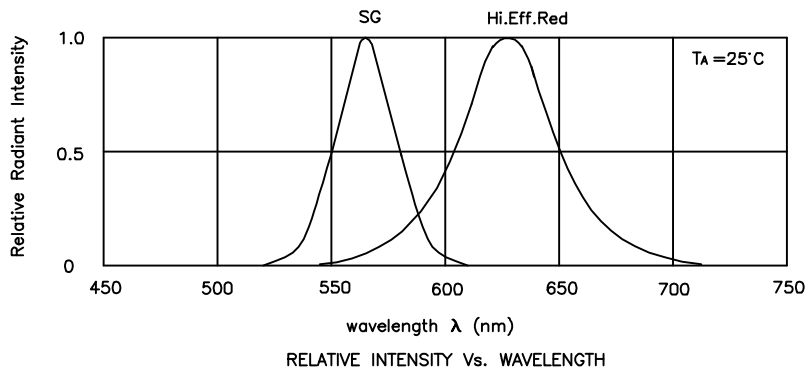
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	$I_F=20mA$
$\lambda_D$	Dominate Wavelength	High Efficiency Red Super Bright Green	625 568		nm	$I_F=20mA$
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	$I_F=20mA$
C	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	$V_F=0V; f=1MHz$
$V_F$	Forward Voltage	High Efficiency Red Super Bright Green	2.0 2.2	2.5 2.5	V	$I_F=20mA$
$I_R$	Reverse Current	All		10	uA	$V_R = 5V$

## Absolute Maximum Ratings at TA=25°C

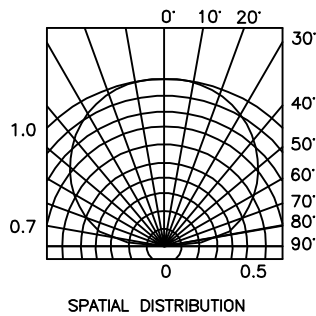
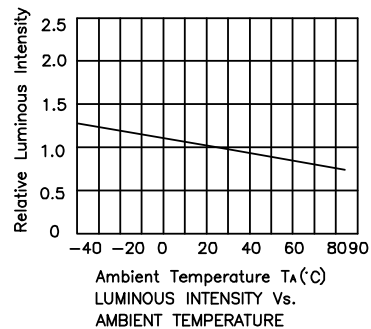
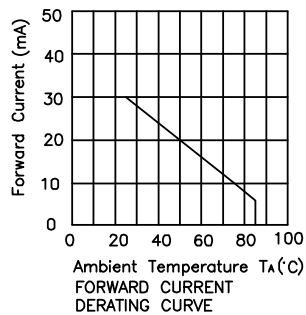
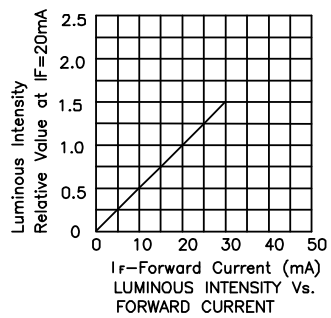
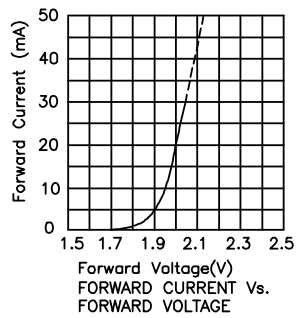
Parameter	High Efficiency Red	Super Bright Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5	5	V
Operating / Storage Temperature	-40°C To +85°C		

Note:

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

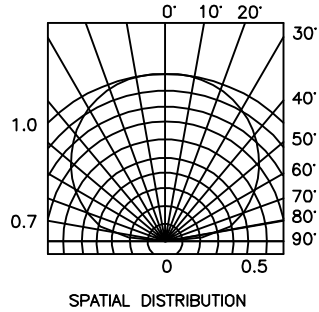
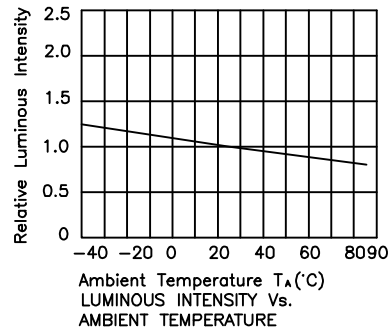
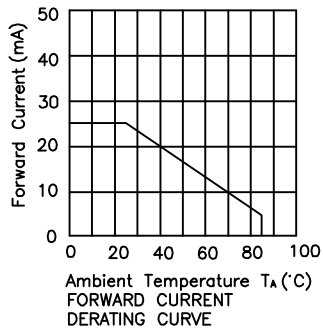
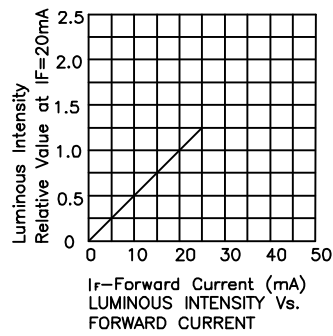
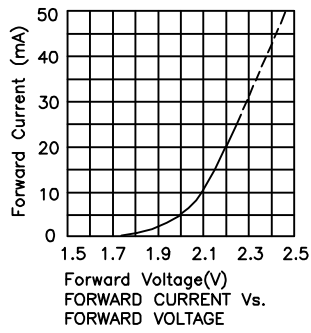


## KPBA-3010ESGC-F01 High Efficiency Red



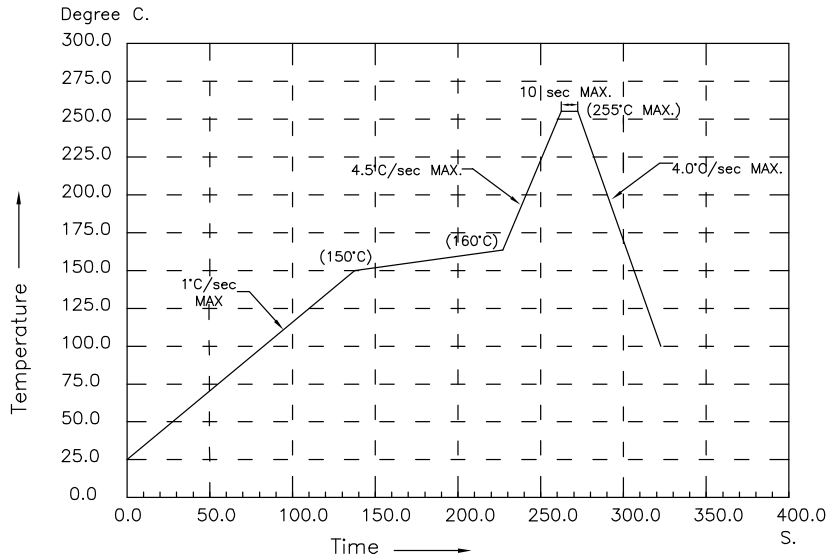
# Kingbright

## Super Bright Green



## KPBA-3010ESGC-F01

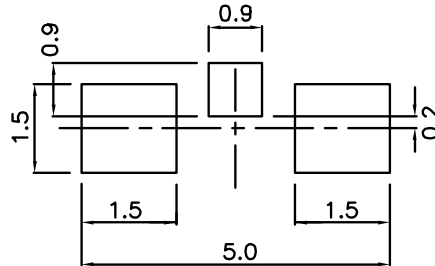
### REFLOW SOLDERING INSTRUCTIONS FOR LEAD-FREE SMT PROCESS



#### NOTES:

1. We recommend the reflow temperature 245°C~255°C. The maximum soldering temperature should be limited to 255°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.

### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

