



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: KPF-3236SRSGMBC-PRV

SUPER BRIGHT RED
SUPER BRIGHT GREEN
BLUE

Features

- LOW POWER CONSUMPTION.
- 3.2mmx3.6mm SMT LED, 1.1mm THICKNESS.
- ONE RED, ONE GREEN AND ONE BLUE CHIPS IN ONE PACKAGE.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 1000PCS / REEL.
- RoHS COMPLIANT.

Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

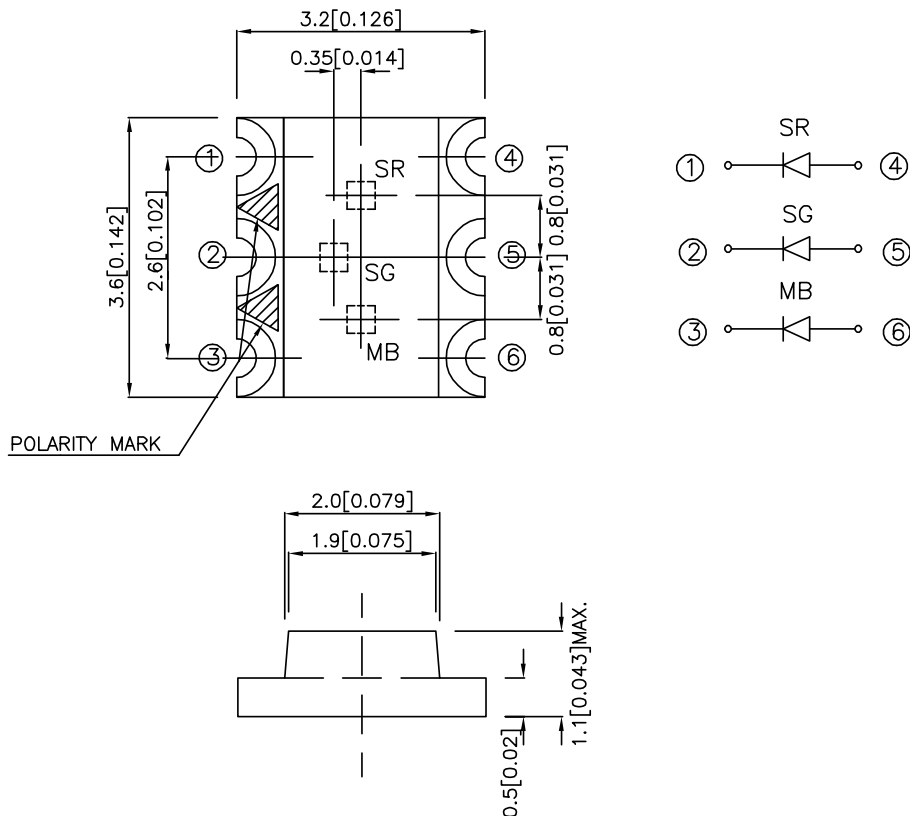
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
KPF-3236SRSGMBC-PRV	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	36	70	120°
	SUPER BRIGHT GREEN (GaP)		2.6	12	
	BLUE (GaN)		1.6	8	

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 T_A=25°C

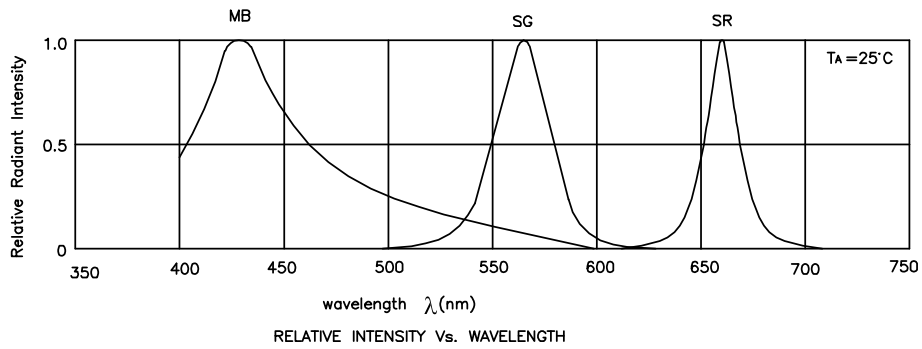
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Red Super Bright Green Blue	660 565 430		nm	I _F =20mA
λ_D	Dominant Wavelength	Super Bright Red Super Bright Green Blue	640 568 466		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Red Super Bright Green Blue	20 30 60		nm	I _F =20mA
C	Capacitance	Super Bright Red Super Bright Green Blue	45 15 100		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Super Bright Red Super Bright Green Blue	1.85 2.2 3.8	2.5 2.5 4.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Red Super Bright Green Blue		10 10 10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

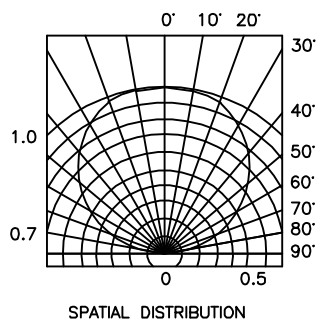
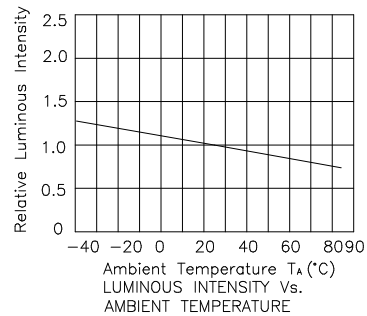
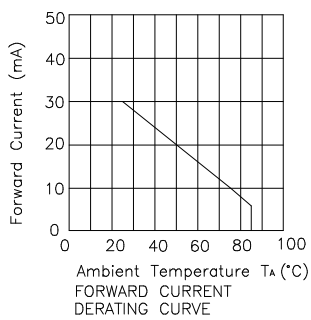
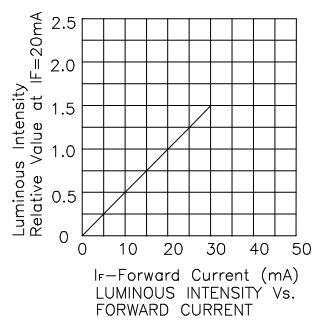
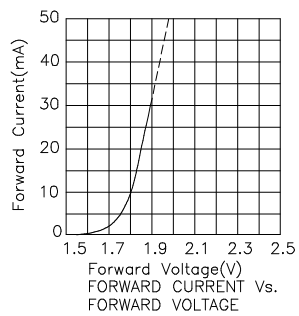
Parameter	Super Bright Red	Super Bright Green	Blue	Units
Power dissipation	100	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	155	140	150	mA
Reverse Voltage	5			V
Operating/Storage Temperature	-40°C To +85°C			

Note:

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

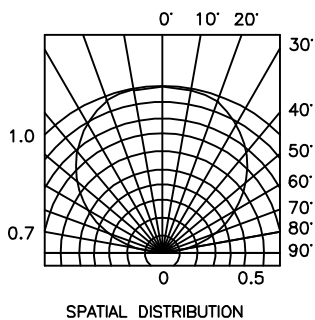
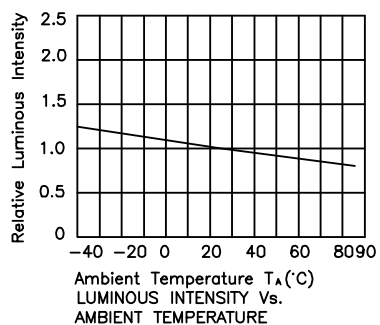
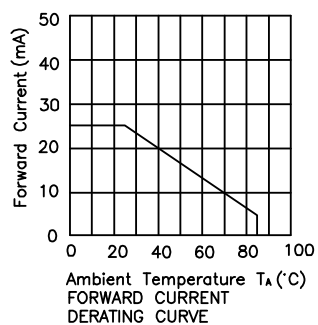
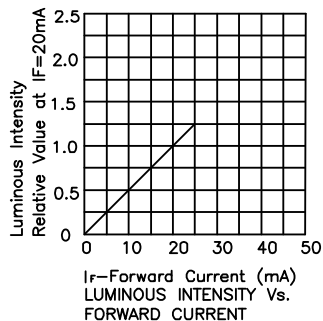
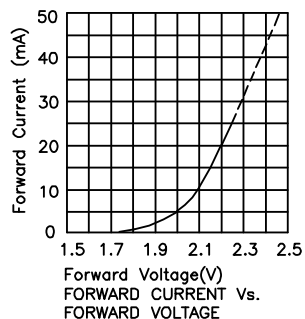


KPF-3236SRSGMBC-PRV Super Bright Red



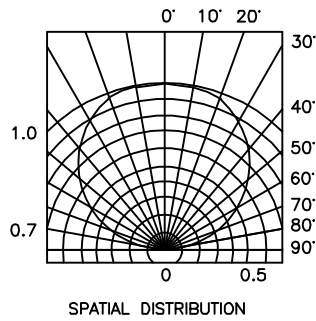
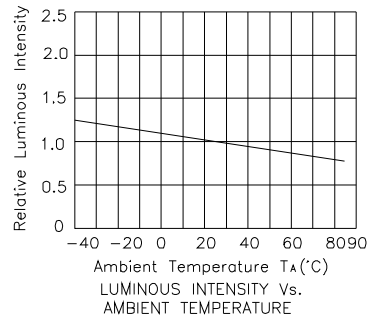
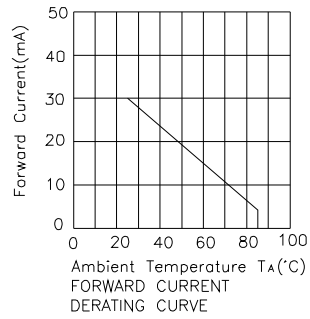
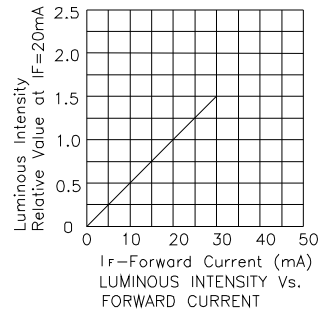
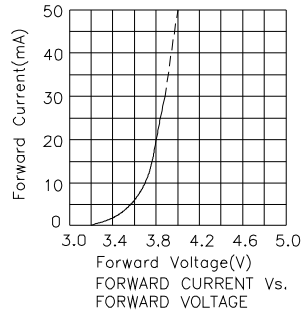
Kingbright

Super Bright Green



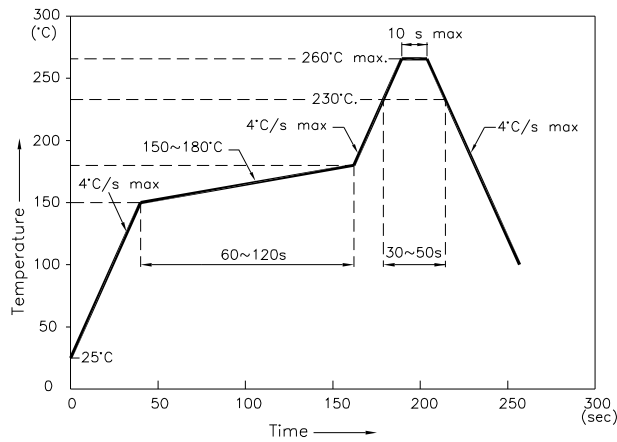
Kingbright

Blue



KPF-3236SRSGMBC-PRV

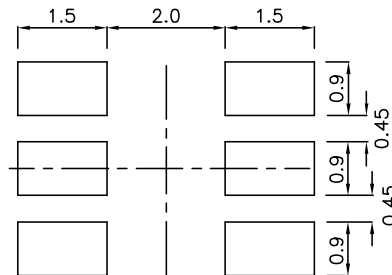
Reflow Soldering Profile For Lead-free SMT Process.



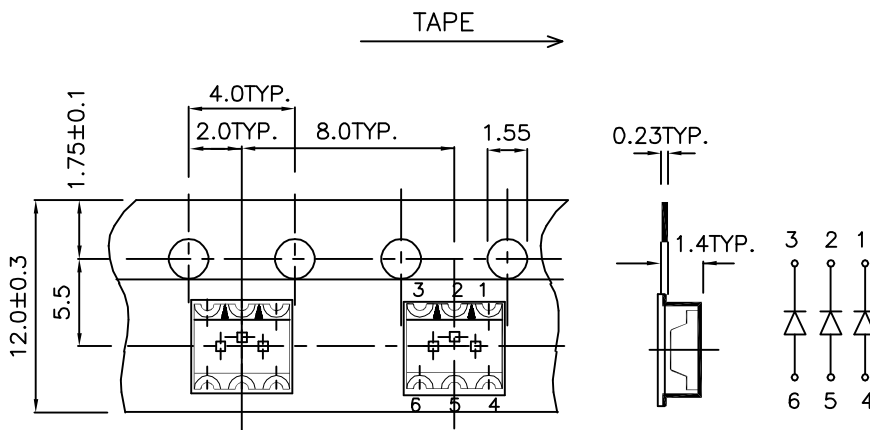
NOTES:

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.