

Part Number: APB3025SRQGCPRV-F01

Super Bright Red
Green

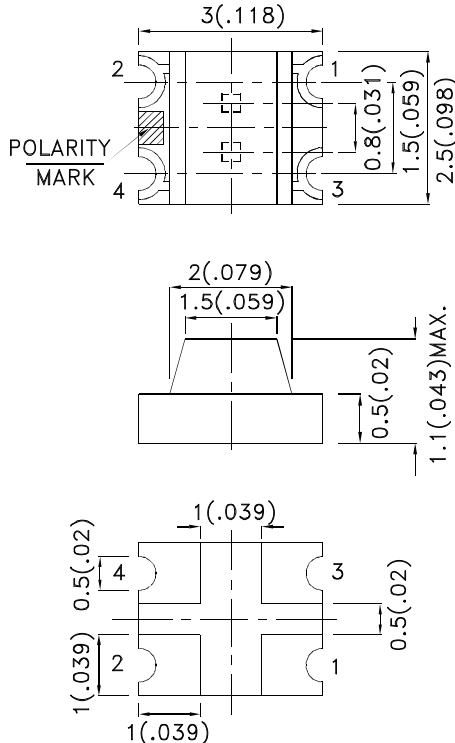
Features

- 3.0mmx2.5mm SMT LED, 1.1mm thickness.
- Bi-color, Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

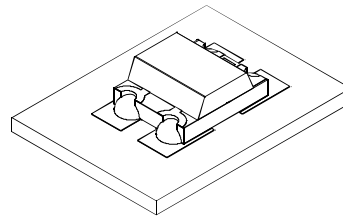
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode. The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



RED
2 1

GREEN
4 3



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior 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
APB3025SRQGCPRV-F01	Super Bright Red (GaAlAs)	Water Clear	55	100	120°
	Green (GaP)		4	12	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak 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	Super Bright Red Green	660 560		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	Super Bright Red Green	640 565		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Super Bright Red Green	20 30		nm	I _F =20mA
C	Capacitance	Super Bright Red Green	45 45		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Red Green	1.85 2.15	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Red Green		10 10	μA	V _R = 5V

Notes:

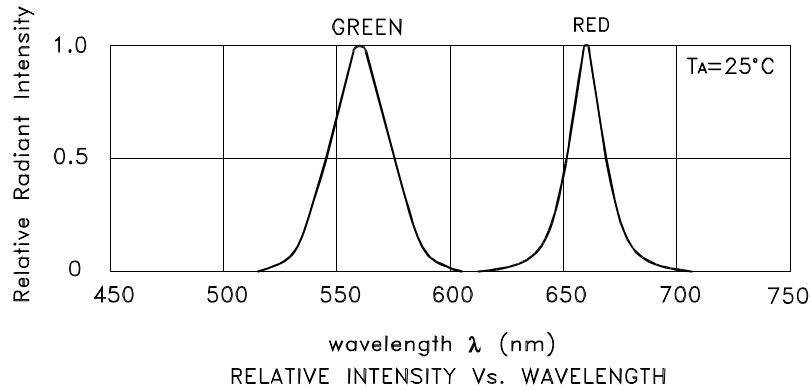
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

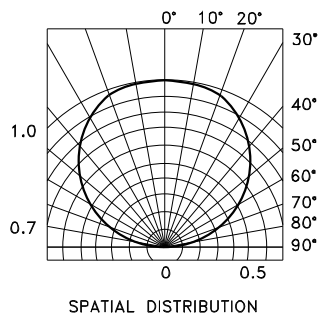
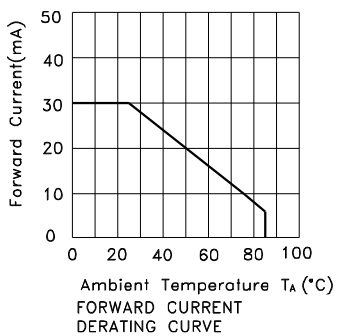
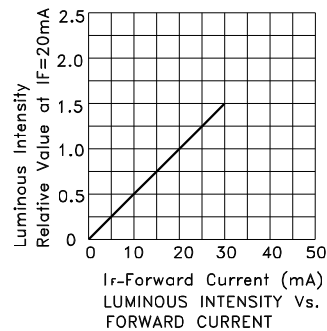
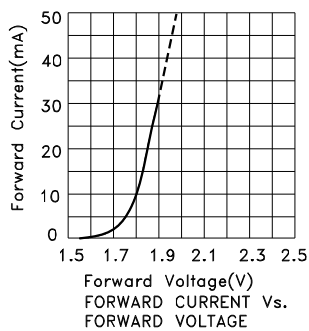
Parameter	Super Bright Red	Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	155	130	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

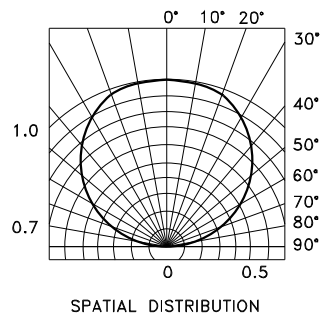
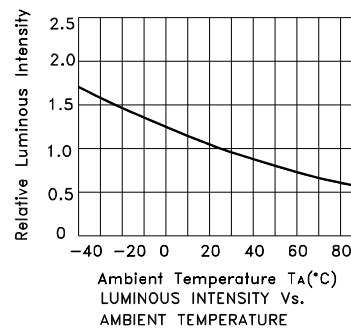
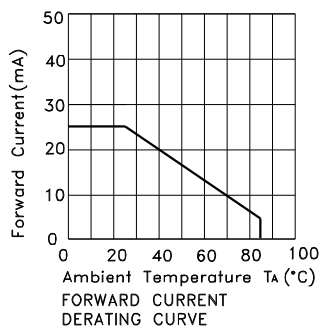
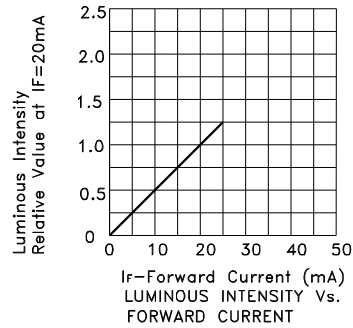
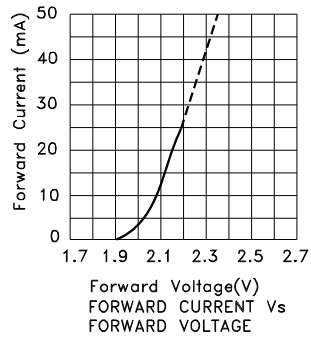
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APB3025SRQGCPRV-F01 Super Bright Red



Green



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Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

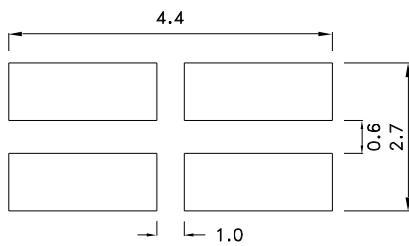
Reflow Soldering Profile For Lead-free SMT Process.



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.

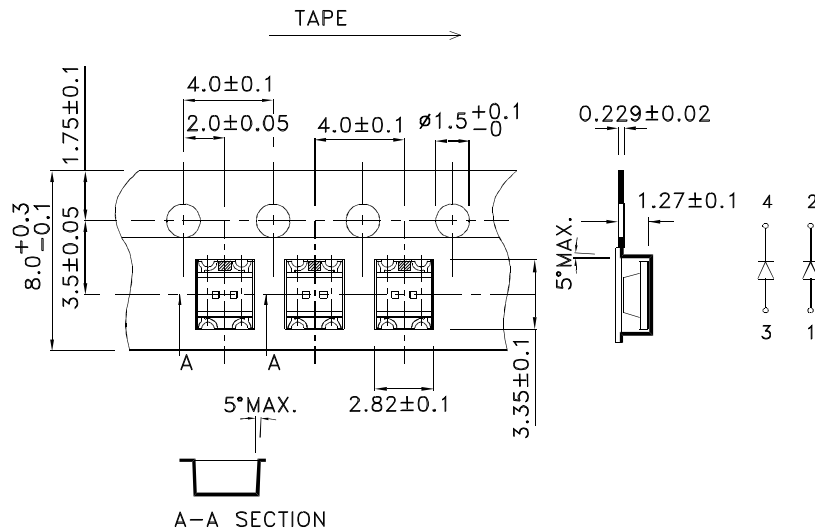
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



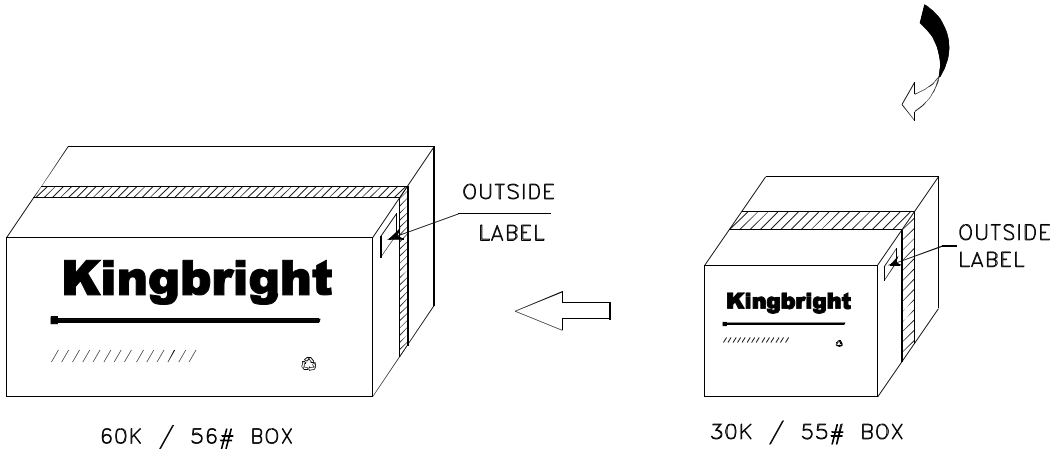
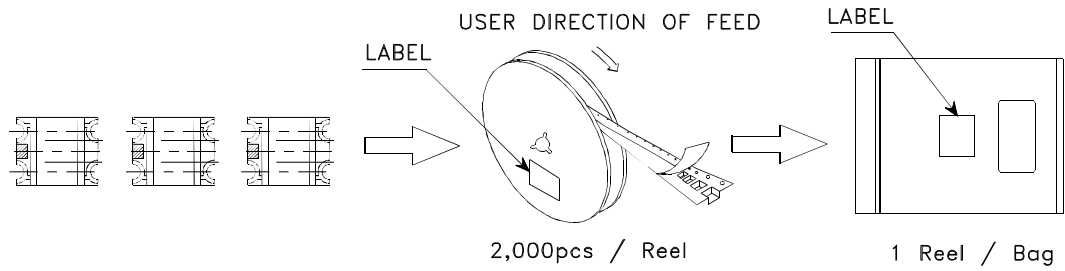
Tape Dimensions (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

APB3025SRQGCPRV-F01



<h1>Kingbright</h1>	
P/NO: APB3025xxx	
QTY: 2,000 pcs	Q.C. Q C XX XX XXXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	