

Part Number: APBL3025SRSGCPR-F01

Super Bright Red
Super Bright Green

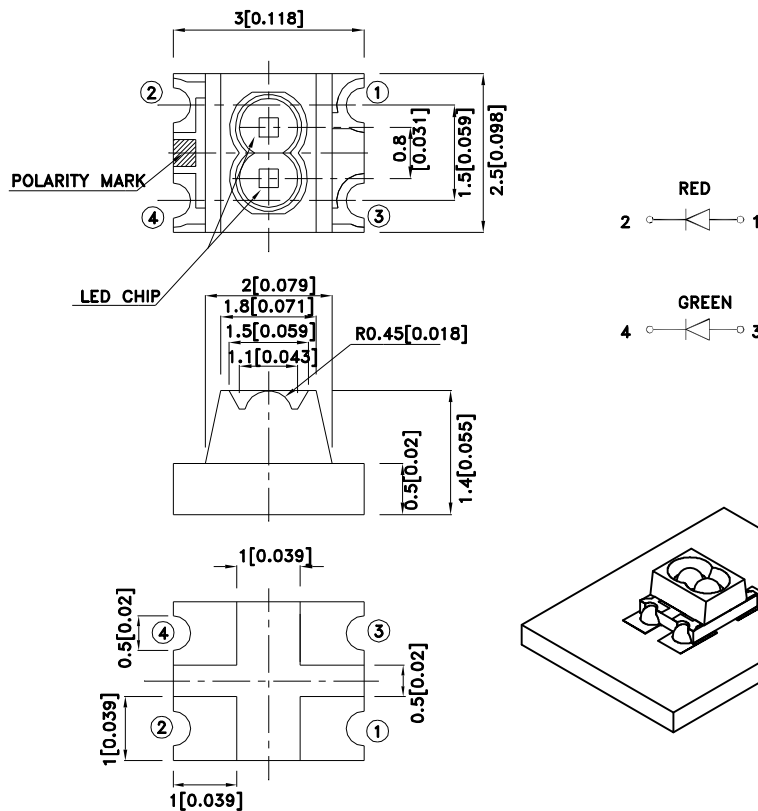
Features

- 3.0mmx2.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Inner lens type.
- Moisture sensitivity level : level 3.
- Package : 2000pcs / reel.
- RoHS compliant.

Descriptions

- 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.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 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
APBL3025SRSGCPR-F01	Super Bright Red (GaAlAs)	Water Clear	100	150	100°
			*20	*50	
	Super Bright Green (GaP)		12	20	
			*12	*20	

Notes:

1. $\theta 1 / 2$ is the angle from optical centerline where the luminous intensity is 1 / 2 of the optical peak value.

2. Luminous intensity / luminous Flux: + / -15%.

* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Red Super Bright Green	655 565		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Super Bright Red Super Bright Green	640 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Red Super Bright Green	20 30		nm	I _F =20mA
C	Capacitance	Super Bright Red Super Bright Green	45 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Red Super Bright Green	1.85 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Red Super Bright Green		10 10	uA	V _R = 5V

Notes:

1. Wavelength: + / -1nm.

2. Forward Voltage: + / -0.1V.

3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

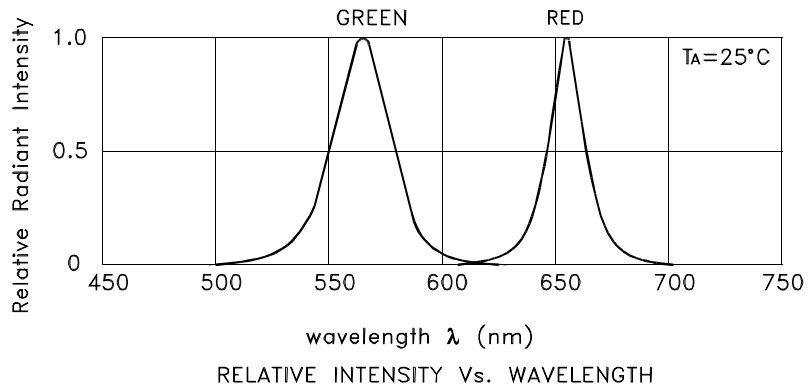
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

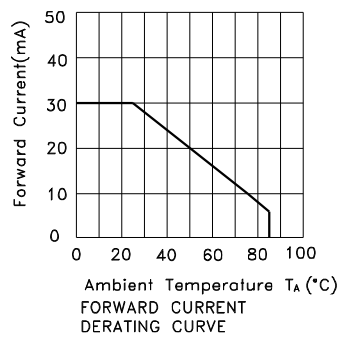
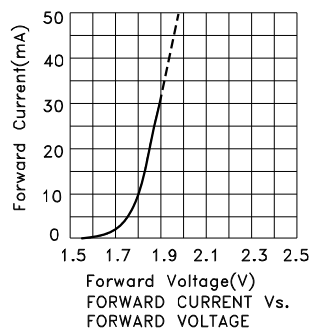
Parameter	Super Bright Red	Super Bright Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	155	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

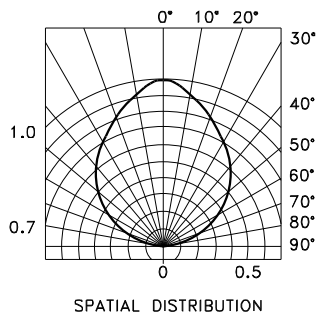
1. 1 / 10 Duty Cycle, 0.1ms Pulse Width.



APBL3025SRSGCPR-F01 Super Bright Red



Super Bright 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.

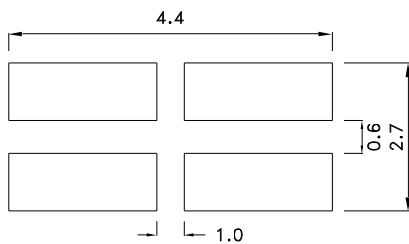
Reflow Soldering Profile For Lead-free SMT Process.



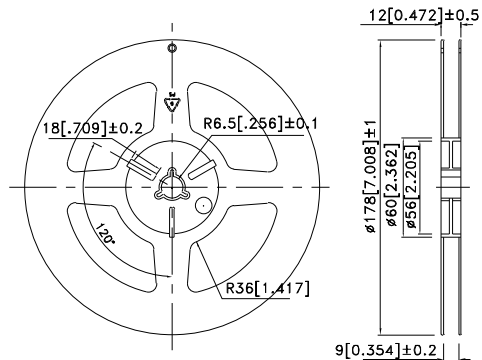
NOTES:

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.

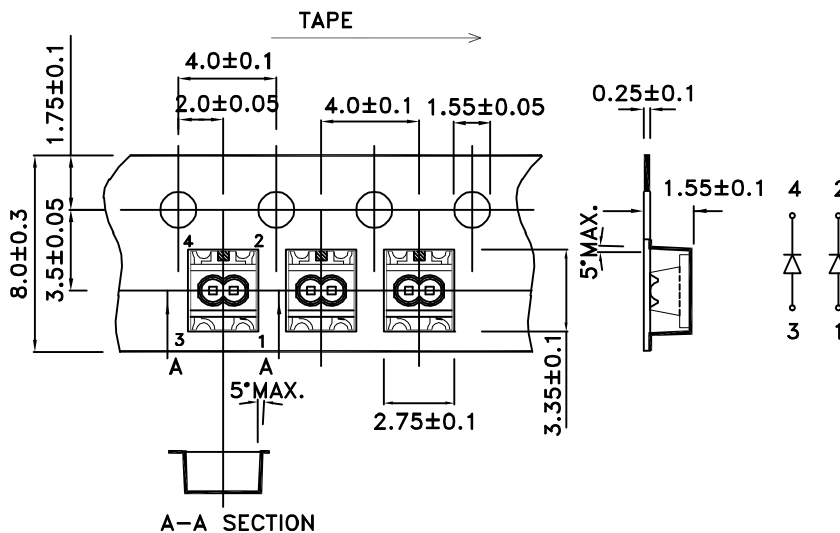
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

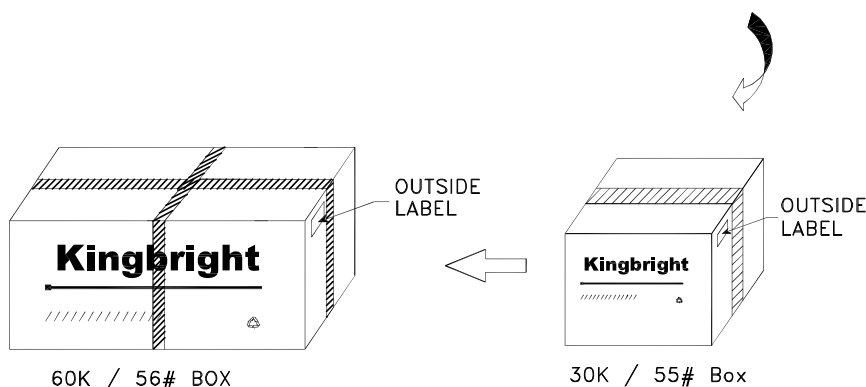
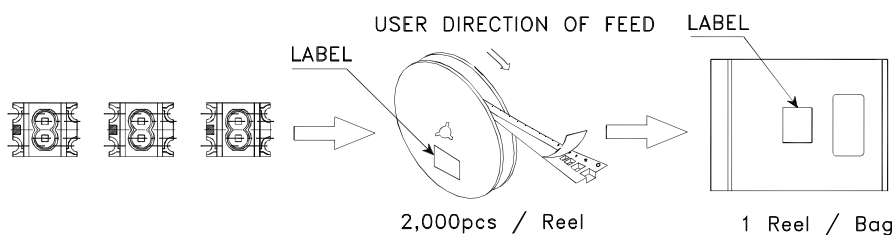



Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APBL3025SRSGCPR-F01



Kingbright	
P/NO: APBL3025xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

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