

PRELIMINARY SPEC

Part Number: APBVA3010SURKSGC

Hyper Red
Super Bright Green

Features

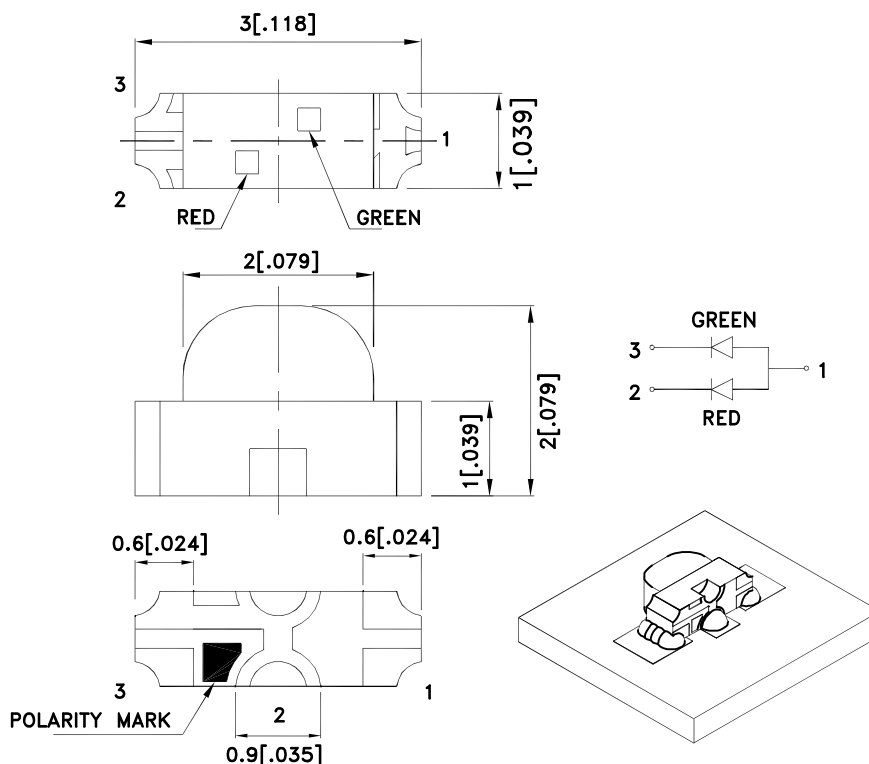
- 3.0mmx1.0mm right angle SMT LED, 2.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

The Hyper Red source color devices are made with Al-GaN on GaAs substrate 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 ± 0.15 (0.006") unless otherwise noted.
3. Specifications are subject to change without 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
APBVA3010SURKSGC	Hyper Red (AlGaInP)	WATER CLEAR	110	200	140°
	Super Bright Green (GaP)		7	15	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red Super Bright Green	650 565		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red Super Bright Green	630 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Super Bright Green	28 30		nm	IF=20mA
C	Capacitance	Hyper Red Super Bright Green	35 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red Super Bright Green	1.95 2.2	2.5 2.5	V	IF=20mA
IR	Reverse Current	Hyper Red Super Bright Green		10 10	uA	VR = 5V

Notes:

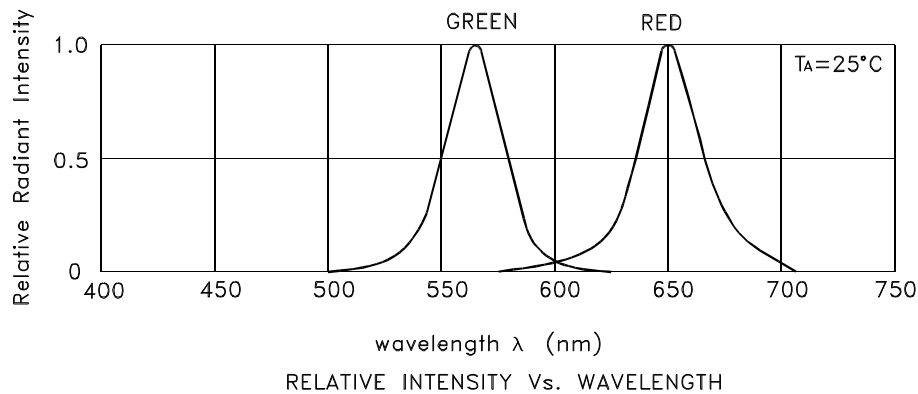
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

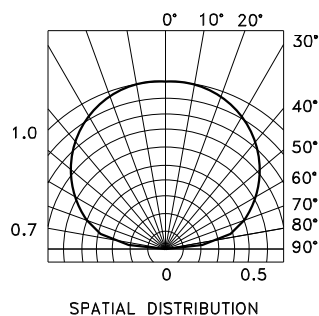
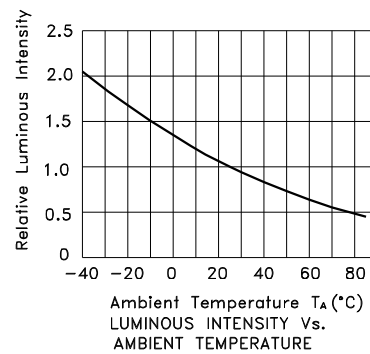
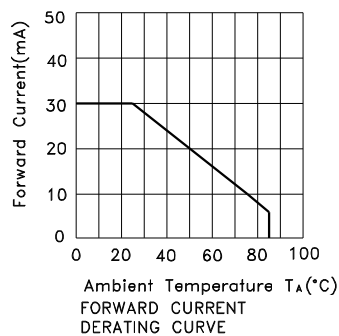
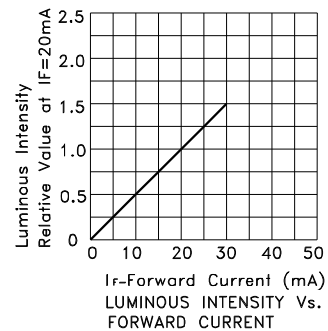
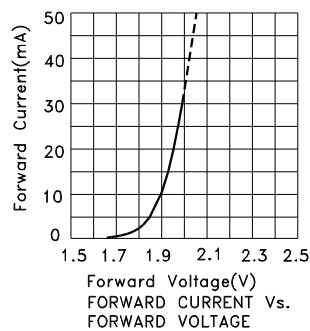
Parameter	Hyper Red	Super Bright Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	185	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

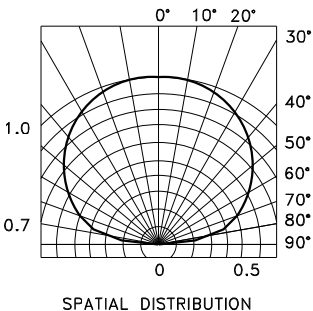
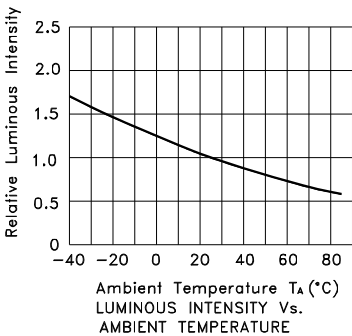
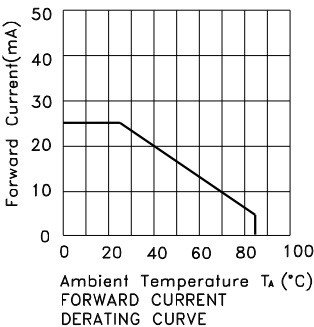
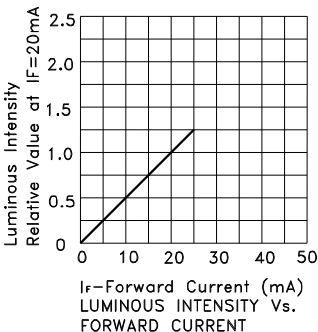
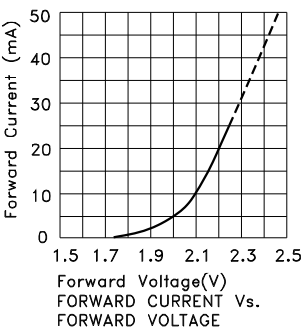
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APBVA3010SURKSGC Hyper Red



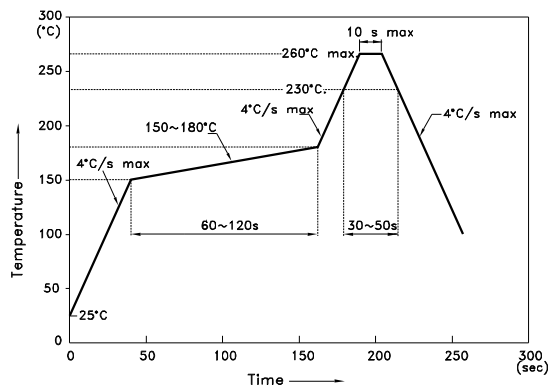
Super Bright Green



APBVA3010SURKSGC

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.

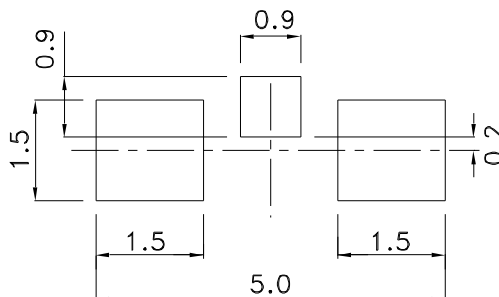
Reflow Soldering Profile For Lead-free SMT Process.



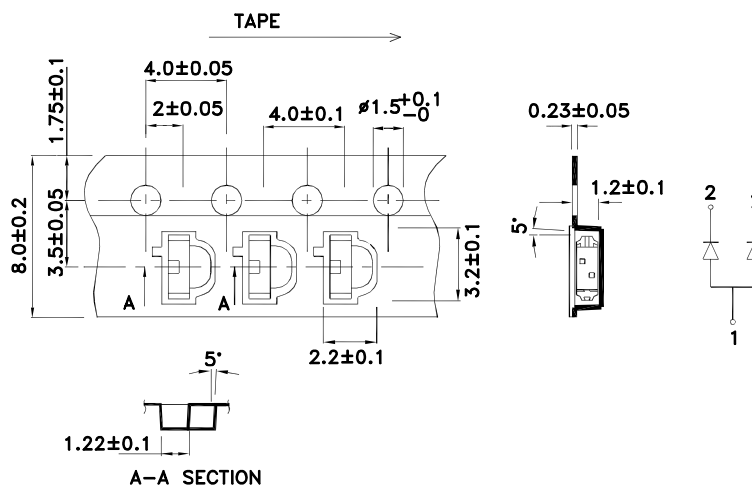
NOTES:

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)

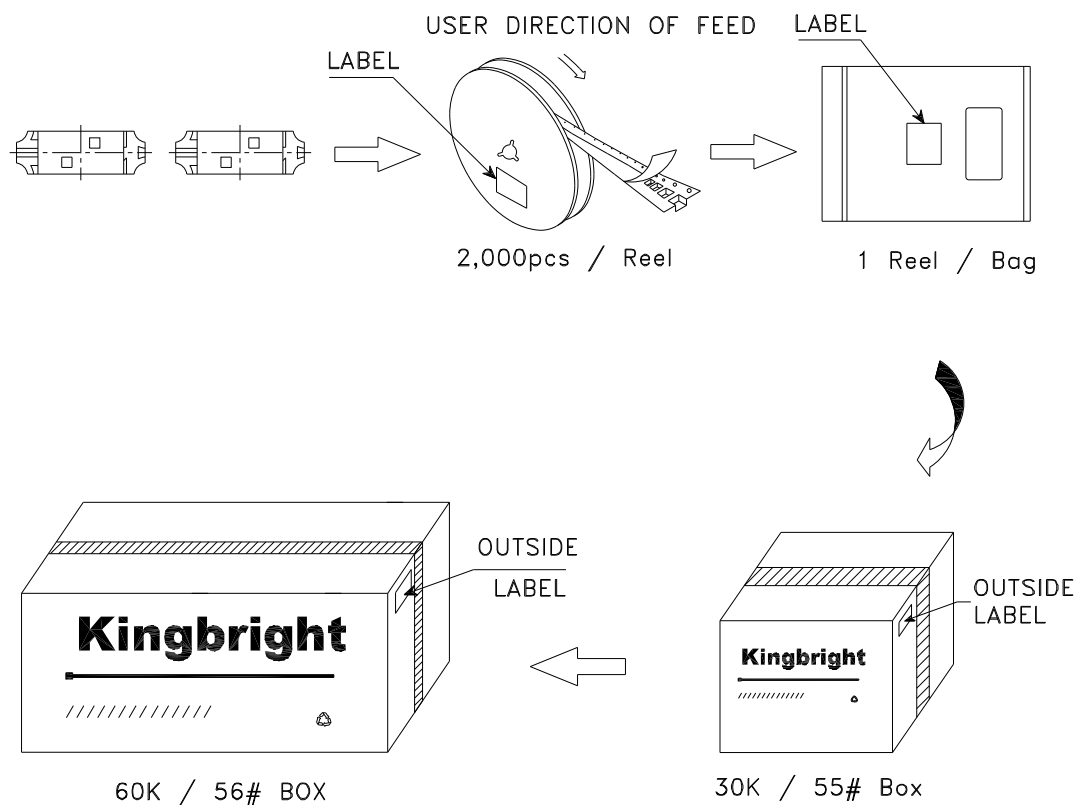


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APBVA3010SURKSGC



Kingbright	
P/NO: APBVA3010xxx	
QTY: 2,000 pcs	Q.C. Q C xx-xx-xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:  xxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	