

1.6x1.5mm BI-COLOR SMD CHIP LED LAMP

Part Number: APTB1615SURKSGC-F01

Hyper Red Super Bright Green

Features

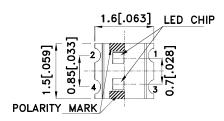
- 1.6mmx1.5mm SMT LED, 0.7mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

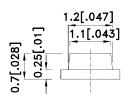
Description

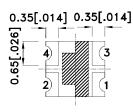
The Hyper Red source color devices are made with Al-GaInP on GaAs substrate Light Emitting Diode.

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

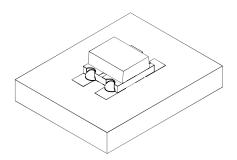
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.

SPEC NO: DSAF1104 **REV NO: V.2** APPROVED: WYNEC **CHECKED: Allen Liu** DATE: FEB/01/2011 DRAWN: Y.L.LI

PAGE: 1 OF 6 ERP: 1203002131

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APTB1615SURKSGC-F01	Hyper Red (AlGaInP)	Water Clear	120	200	120°
	Super Bright Green (GaP)	Water Clear	8	15	

- 1. 01/2 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	Тур.	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
С	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
lr	Reverse Current	Hyper Red Super Bright Green		10 10	uA	V _R = 5V

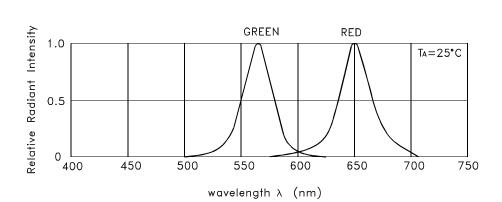
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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		V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

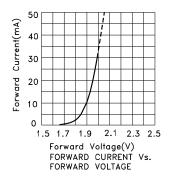
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

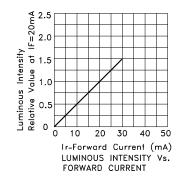
DATE: FEB/01/2011 SPEC NO: DSAF1104 **REV NO: V.2** PAGE: 2 OF 6 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.L.LI ERP: 1203002131

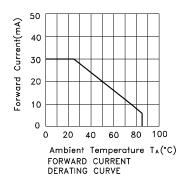


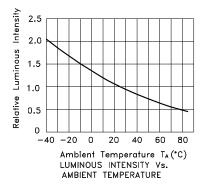
RELATIVE INTENSITY Vs. WAVELENGTH

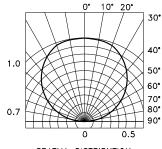
APTB1615SURKSGC-F01 Hyper Red







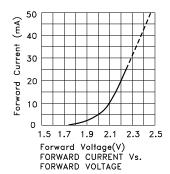


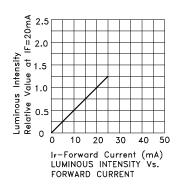


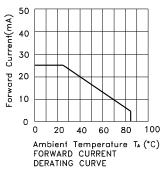
SPATIAL DISTRIBUTION

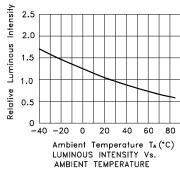
SPEC NO: DSAF1104 REV NO: V.2 DATE: FEB/01/2011 PAGE: 3 OF 6
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.L.LI ERP: 1203002131

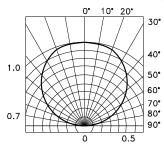
Super Bright Green











SPATIAL DISTRIBUTION

 SPEC NO: DSAF1104
 REV NO: V.2
 DATE: FEB/01/2011
 PAGE: 4 OF 6

 APPROVED: WYNEC
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 ERP: 1203002131

APTB1615SURKSGC-F01

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.



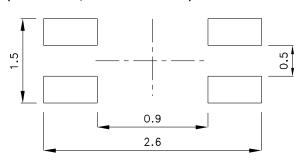
- NOTES:

 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.

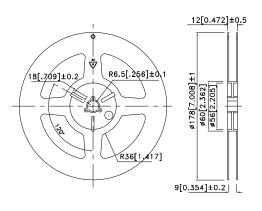
 3.Number of reflow process shall be 2 times or less.

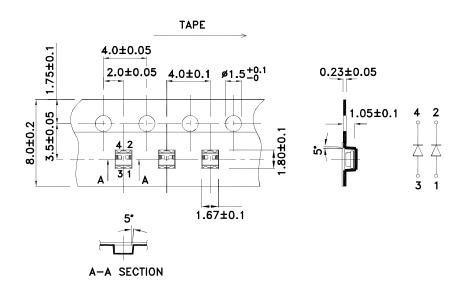
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension



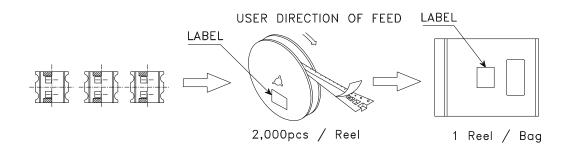


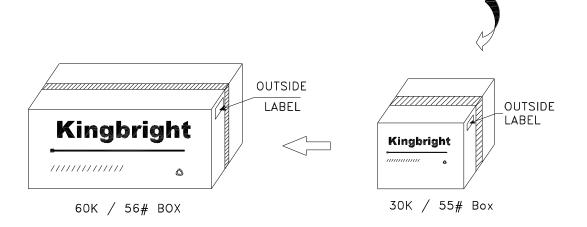
SPEC NO: DSAF1104 **REV NO: V.2 APPROVED: WYNEC CHECKED: Allen Liu** **DATE: FEB/01/2011** DRAWN: Y.L.LI

PAGE: 5 OF 6 ERP: 1203002131

PACKING & LABEL SPECIFICATIONS

APTB1615SURKSGC-F01







SPEC NO: DSAF1104 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: FEB/01/2011 DRAWN: Y.L.LI PAGE: 6 OF 6 ERP: 1203002131