

2.0x1.25mm SMD CHIP LED LAMP

Part Number: APHCM2012SYCK-F01

Super Bright Yellow

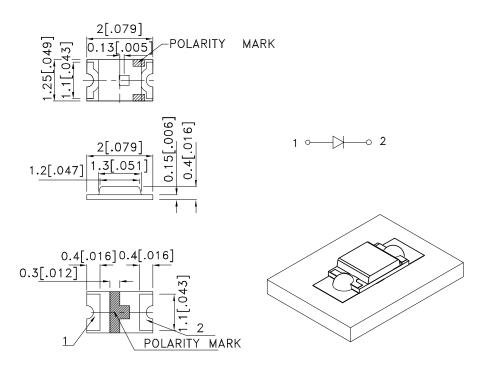
Features

- 2.0X1.25mm SMT LED,0.5mm max. thickness.
- 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 Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ 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: DSAF1344 **REV NO: V.6B** DATE: MAR/24/2015 PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203003837

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] ns Type @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APHCM2012SYCK-F01	Super Bright Yellow (AlGalnP)	Water Clear	80	150	110°

Notes:

- 1. θ 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%.
- 3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	I=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	20		nm	IF=20mA
С	Capacitance	Super Bright Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	I==20mA
lr	Reverse Current	Super Bright Yellow		10	uA	V _R =5V

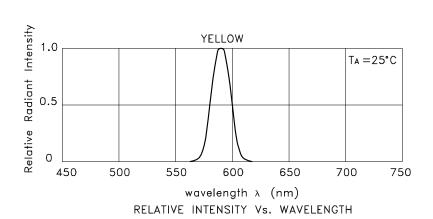
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

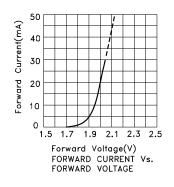
Parameter	Super Bright Yellow	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	175	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

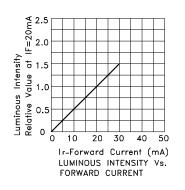
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

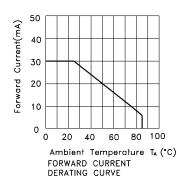
PAGE: 2 OF 5 SPEC NO: DSAF1344 **REV NO: V.6B** DATE: MAR/24/2015 APPROVED: WYNEC **CHECKED: Allen Liu** ERP: 1203003837 DRAWN: L.Q.Xie

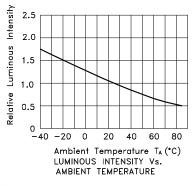


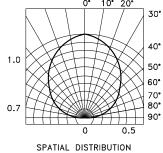
Super Bright Yellow APHCM2012SYCK-F01











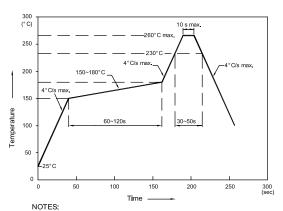
 SPEC NO: DSAF1344
 REV NO: V.6B
 DATE: MAR/24/2015
 PAGE: 3 OF 5

 APPROVED: WYNEC
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APHCM2012SYCK-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.

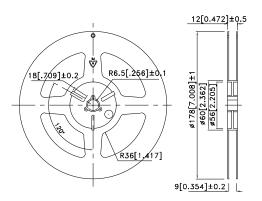
Reflow Soldering Profile For Lead-free SMT Process.



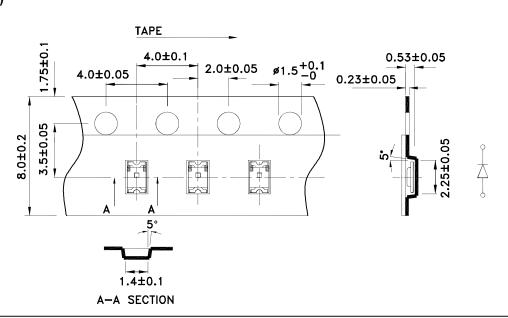
- 1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2. Don't cause stress to the epoxy resin while it is exposed $% \left(1\right) =\left(1\right) \left(1\right)$
- to high temperature.
 3.Number of reflow process shall be 2 times or less.

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

Reel Dimension



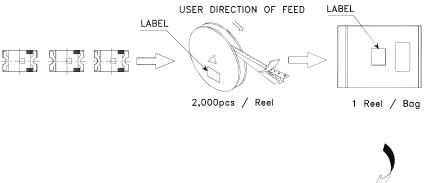
Tape Dimensions (Units: mm)

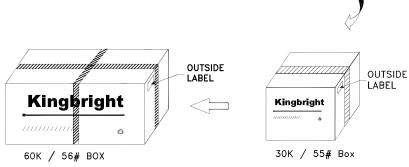


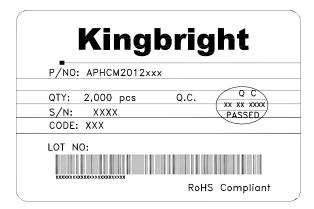
SPEC NO: DSAF1344 APPROVED: WYNEC REV NO: V.6B CHECKED: Allen Liu DATE: MAR/24/2015 DRAWN: L.Q.Xie PAGE: 4 OF 5 ERP: 1203003837

PACKING & LABEL SPECIFICATIONS

APHCM2012SYCK-F01







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 SPEC NO: DSAF1344
 REV NO: V.6B
 DATE: MAR/24/2015
 PAGE: 5 OF 5

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AMEYA360 Components Supply Platform

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