

3.0mmx1.5mm SMD CHIP LED LAMP

Part Number: APL3015SURCK-F01 Hyper Red

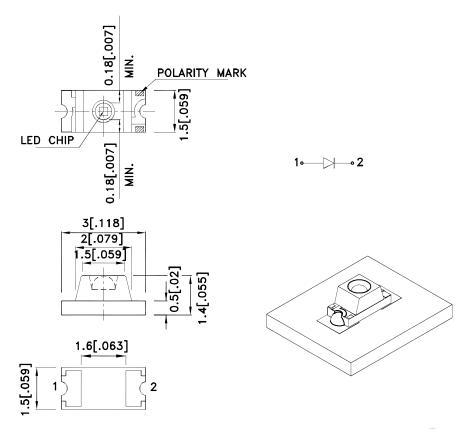
Features

- 3.0mmx1.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- 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.

Package Dimensions



SPEC NO: DSAF1078

APPROVED: WYNEC

- 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.

REV NO: V.5 DATE: APR/19/2011 PAGE: 1 OF 5 **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203001628

Selection Guide

Part No.	No. Dice Lens Type		Iv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
APL3015SURCK-F01	Hyper Red (AlGaInP)	Water Clear	300	600	70°

- 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	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	650		nm	I=20mA
λD [1]	Dominant Wavelength	Hyper Red	630		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	IF=20mA
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	I=20mA
lR	Reverse Current	Hyper Red		10	uA	V _R =5V

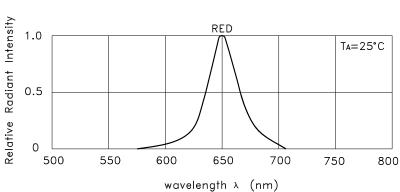
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	185	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.

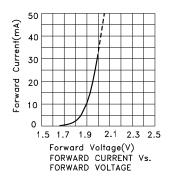
SPEC NO: DSAF1078 **REV NO: V.5** DATE: APR/19/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203001628

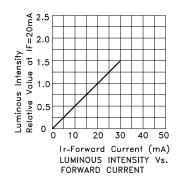


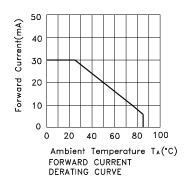
RELATIVE INTENSITY Vs. WAVELENGTH

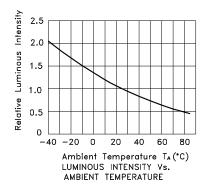
Hyper Red

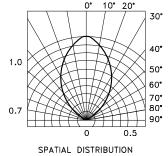
APL3015SURCK-F01











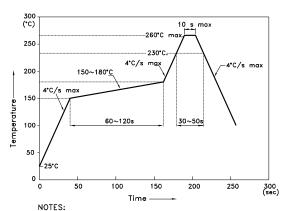
 SPEC NO: DSAF1078
 REV NO: V.5
 DATE: APR/19/2011
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1203001628

APL3015SURCK-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.

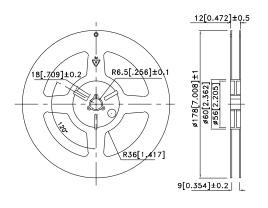
 3.Number of reflow process shall be 2 times or less.

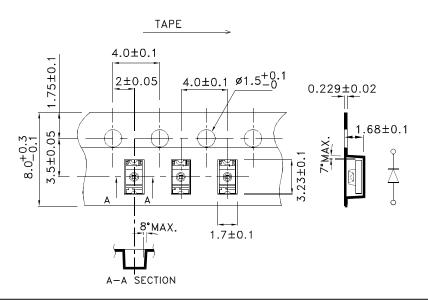
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

4.4 1.6

Tape Dimensions (Units: mm)

Reel Dimension

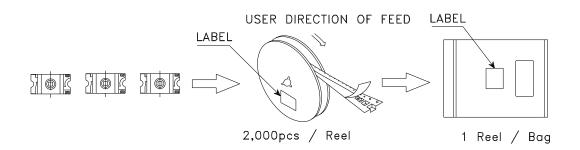


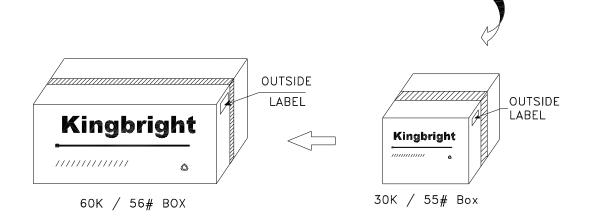


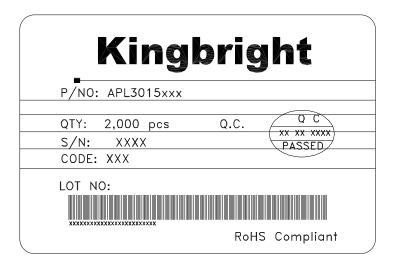
SPEC NO: DSAF1078 **REV NO: V.5 DATE: APR/19/2011** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203001628

PACKING & LABEL SPECIFICATIONS

APL3015SURCK-F01







SPEC NO: DSAF1078
APPROVED: WYNEC

REV NO: V.5 CHECKED: Allen Liu DATE: APR/19/2011 DRAWN: J.Yu PAGE: 5 OF 5 ERP: 1203001628