

3.2mmx1.6mm SMD CHIP LED LAMP

Part Number: APT3216LSECK/J4-PRV

Super Bright Orange

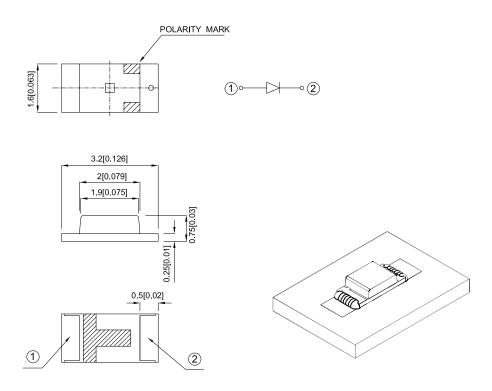
Features

- 3.2mmx1.6mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Description

The Orange source color devices are made with AlGaInP 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: DSAN8400 **REV NO: V.3A** DATE: MAR/24/2015 PAGE: 1 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: L.Q.Xie ERP: 1203014467

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
APT3216LSECK/J4-PRV	Super Bright Orange (AlGaInP)	Matau Class	80	150	- 120°
		Water Clear	*30	*50	

- $1.\,\theta1/2$ is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 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	Min.	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange		611		nm	IF=2mA
λD [1]	Dominant Wavelength	Super Bright Orange		605		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange		17		nm	IF=2mA
С	Capacitance	Super Bright Orange		27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	1.5	1.8	2.1	V	IF=2mA
lr	Reverse Current	Super Bright Orange			10	uA	V _R =5V

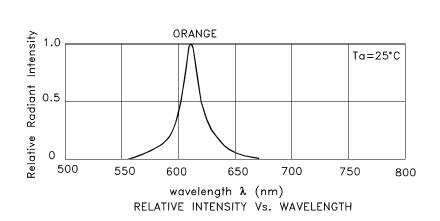
- Notes: 1.Wavelength: +/-1nm. 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Orange			
Power dissipation	dissipation 63			
DC Forward Current	30	mA		
Peak Forward Current [1]	1] 150			
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

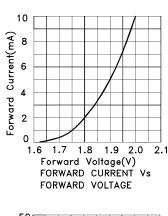
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

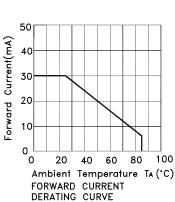
SPEC NO: DSAN8400 **REV NO: V.3A** DATE: MAR/24/2015 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203014467

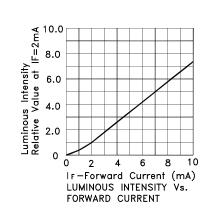


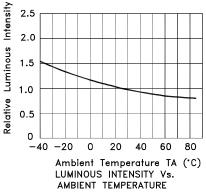
Super Bright Orange

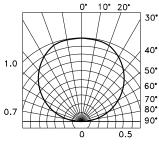
APT3216LSECK/J4-PRV











SPATIAL DISTRIBUTION

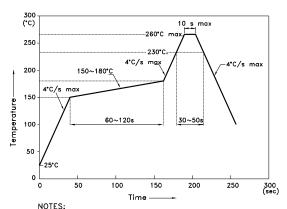
 SPEC NO: DSAN8400
 REV NO: V.3A
 DATE: MAR/24/2015
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: L.Q.Xie
 ERP: 1203014467

APT3216LSECK/J4-PRV

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.



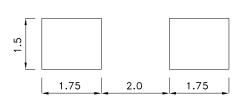
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

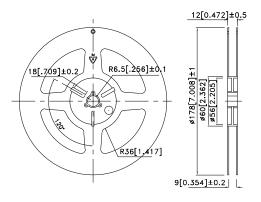
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

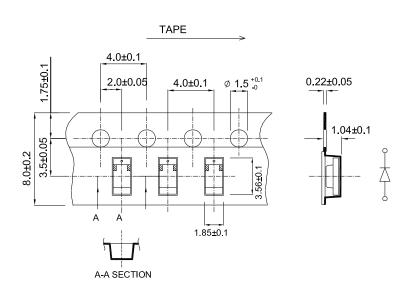
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units : mm)



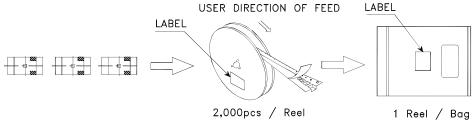
SPEC NO: DSAN8400 APPROVED: WYNEC

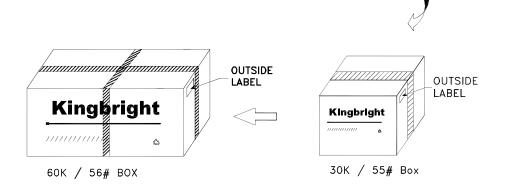
REV NO: V.3A CHECKED: Allen Liu DATE: MAR/24/2015 DRAWN: L.Q.Xie

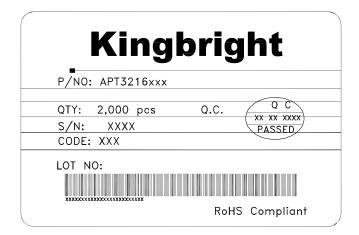
PAGE: 4 OF 5 ERP: 1203014467

PACKING & LABEL SPECIFICATIONS

APT3216LSECK/J4-PRV







Terms and conditions for the usage of this document

- 1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
- 6. All design applications should refer to Kingbright application notes available at http://www.KingbrightUSA.com/ApplicationNotes

REV NO: V.3A DATE: MAR/24/2015 PAGE: 5 OF 5 SPEC NO: DSAN8400 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203014467