

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Kingbright APGA1602SYC/KA

For any questions, you can email us directly: sales@integrated-circuit.com



1.6x0.2mm RIGHT ANGLE SMD CHIP LED LAMP

Part Number: APGA1602SYC/KA

Super Bright Yellow

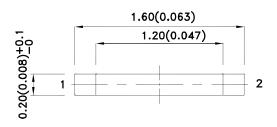
Features

- 1.6mmx0.2mm right angle SMT LED,0.2mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Moisture sensitivity level : level 3.
- Package :2000pcs / reel.
- Tinned pads for improved solderability.
- RoHS compliant.

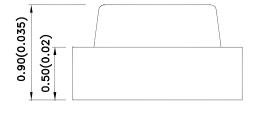
Description

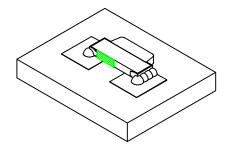
The Super Bright Yellow source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

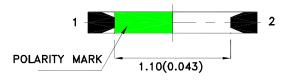
Package Dimensions











Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
- 4. The device has a single mounting surface. The device must be mounted according to the specifications.

SPEC NO: DSAN2009 REV NO: V.2B DATE: APR/22/2015 PAGE: 1 OF 5



Distributor of Kingbright: Excellent Integrated System Limited Datasheet of APGA1602SYC/KA - LED YELLOW CLEAR 0603 R/A SMD

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

Kingbright

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APGA1602SYC/KA	Super Bright Yellow (AlGaInP)	Water Clear	40	75	160°(H) 120°(V)

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	591		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	589		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	15		nm	IF=20mA
VF [2]	Forward Voltage	Super Bright Yellow	2.05	2.4	V	IF=20mA
lR	Reverse Current	Super Bright Yellow		10	uA	VR=5V

Notes:

- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

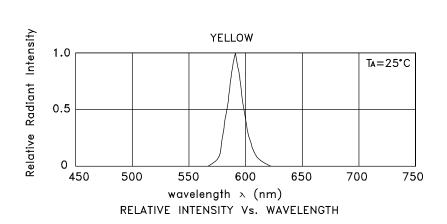
<u></u>					
Parameter	Super Bright Yellow	Units			
Power dissipation	48	mW			
DC Forward Current	20	mA			
Peak Forward Current [1]	100	mA			
Reverse Voltage	5	V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +100°C				

Note:

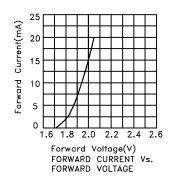
SPEC NO: DSAN2009 REV NO: V.2B DATE: APR/22/2015 PAGE: 2 OF 5

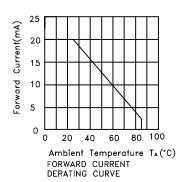
^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

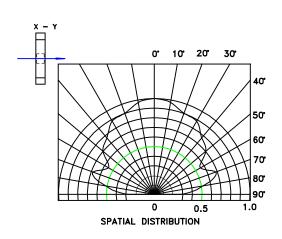


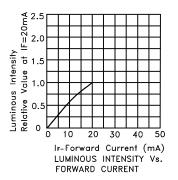


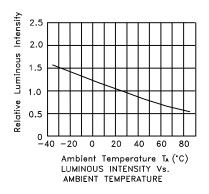
Super Bright Yellow APGA1602SYC/KA

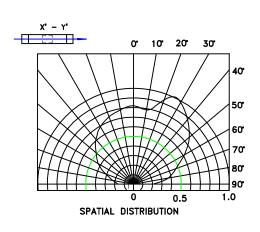












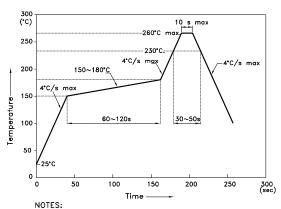
SPEC NO: DSAN2009 REV NO: V.2B DATE: APR/22/2015 PAGE: 3 OF 5



APGA1602SYC/KA

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.

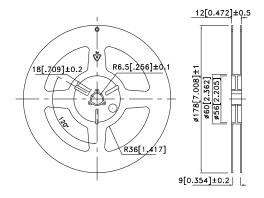
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

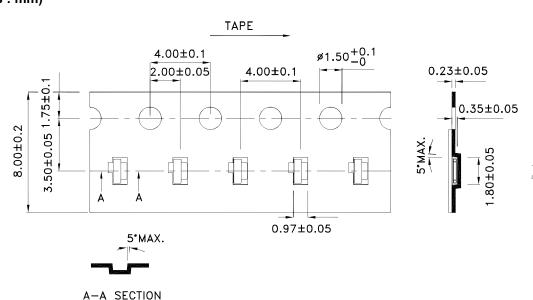
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

1.8

Reel Dimension



Tape Dimensions (Units: mm)

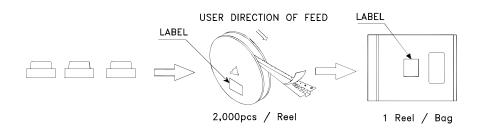


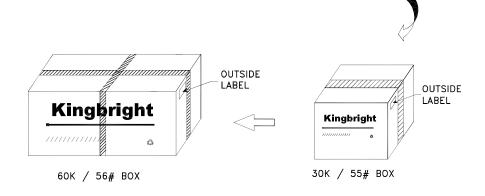
SPEC NO: DSAN2009 REV NO: V.2B DATE: APR/22/2015 PAGE: 4 OF 5

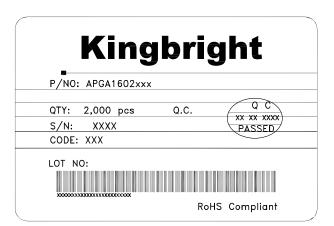


PACKING & LABEL SPECIFICATIONS

APGA1602SYC/KA







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

SPEC NO: DSAN2009 **REV NO: V.2B DATE: APR/22/2015** PAGE: 5 OF 5