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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Part Number: APGA1602CGC/KA Green

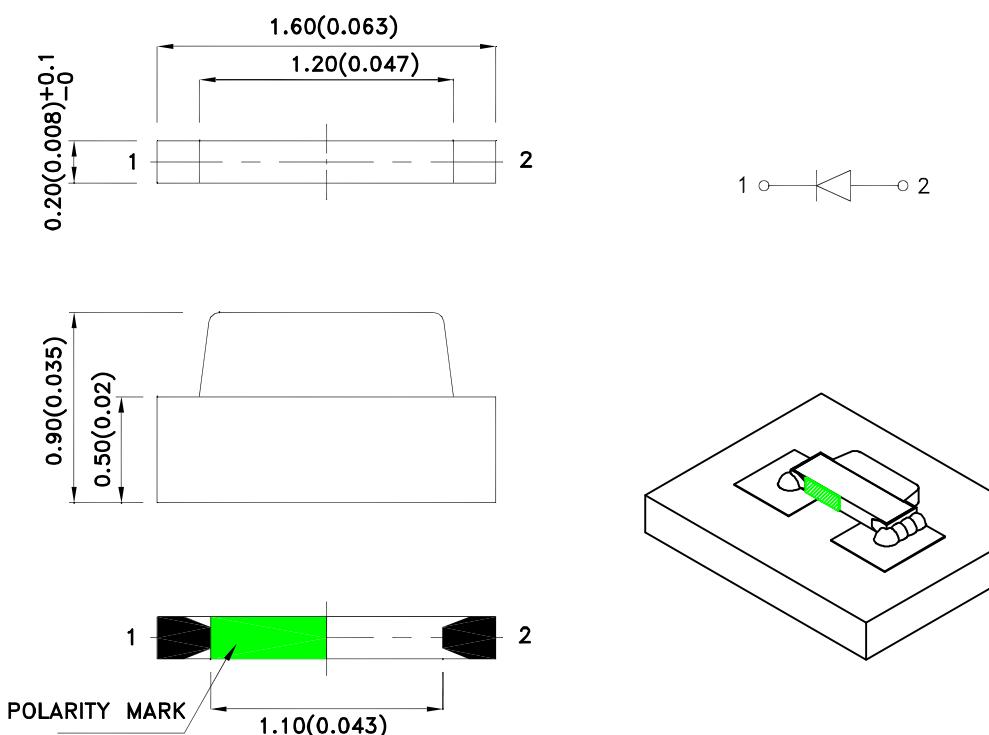
Features

- 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 Green source color devices are made with AlGaNp 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.



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Selection Guide

Part No.	Dice	Lens Type	I _v (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	
APGA1602CGC/KA	Green (AlGaNp)	Water Clear	12	30	160°(H) 145°(V)

Notes:

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

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Green	573		nm	I _F =20mA
λD [1]	Dominant Wavelength	Green	571		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	Green	15		nm	I _F =20mA
C	Capacitance	Green	15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Green	2.05	2.4	V	I _F =20mA
I _R	Reverse Current	Green		10	uA	V _R =5V

Notes:

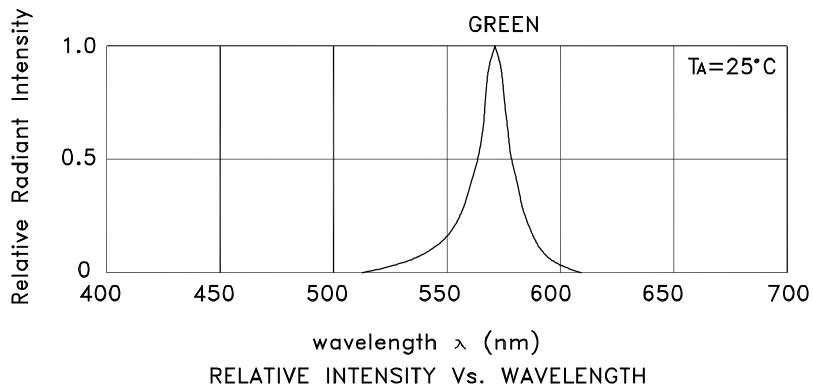
1. Wavelength: + / -1nm.
2. Forward Voltage: + / -0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Green	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	

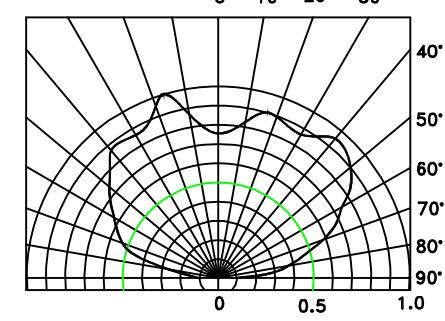
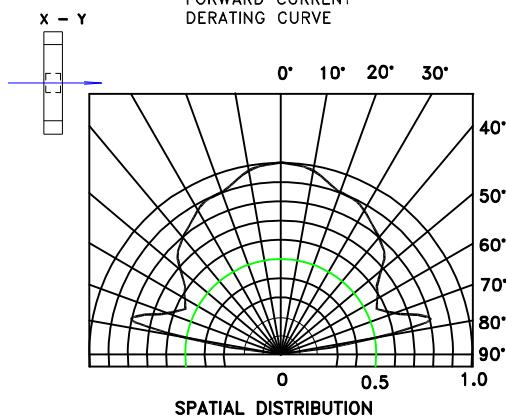
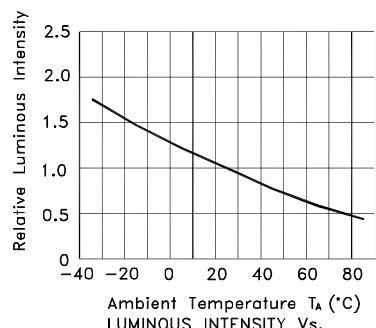
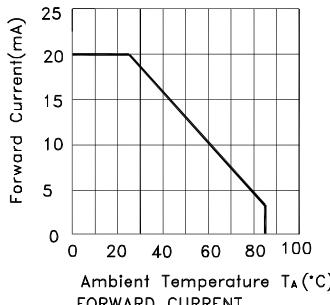
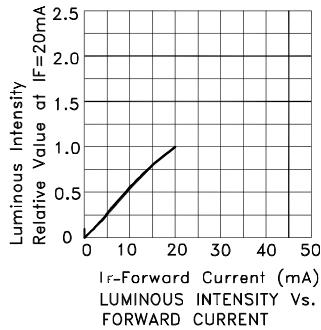
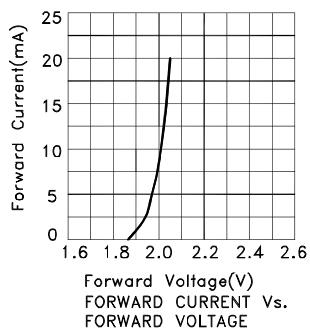
Note:

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



Green

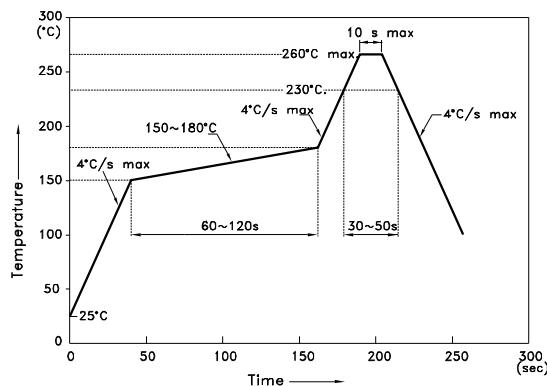
APGA1602CGC/KA



APGA1602CGC/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.

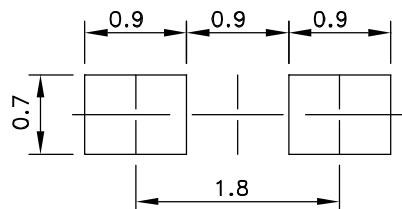
Reflow Soldering Profile For Lead-free SMT Process.



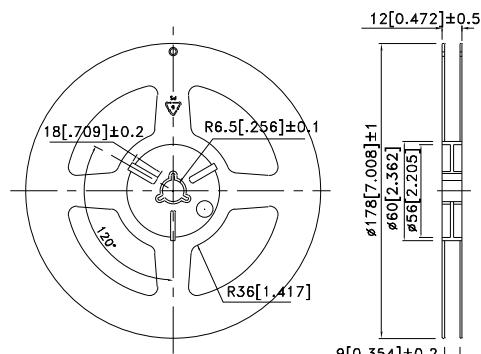
NOTES:

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.

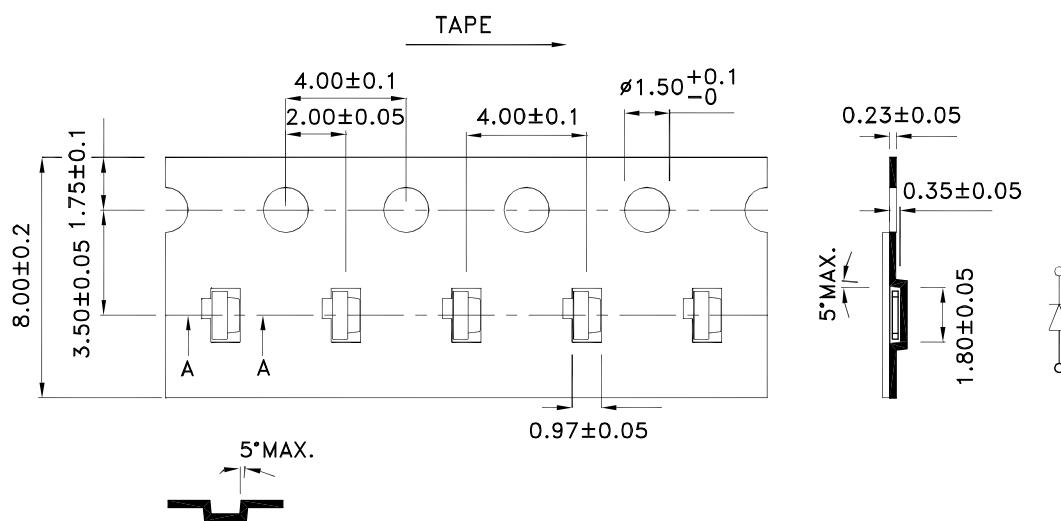
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units : mm)

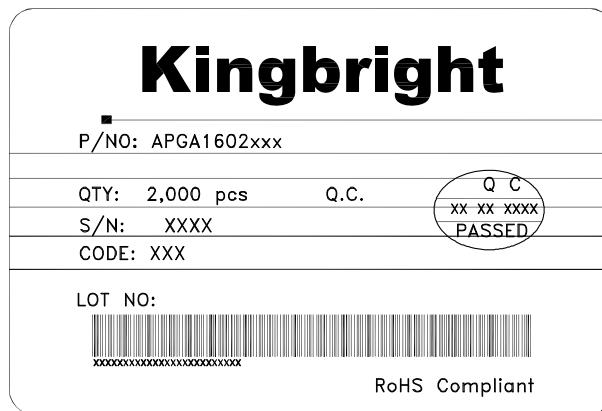
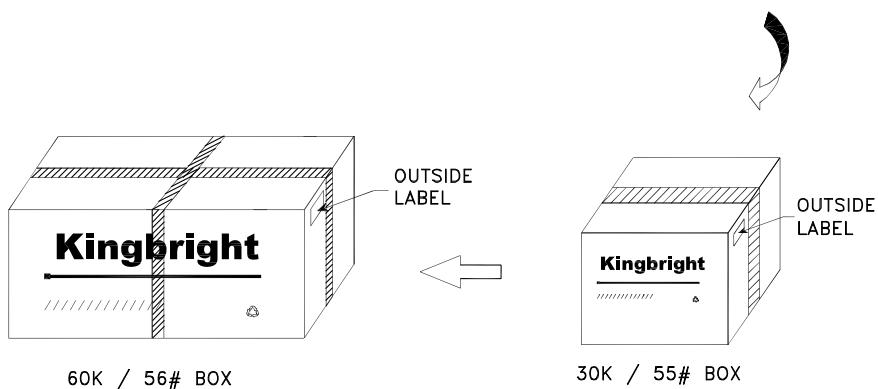
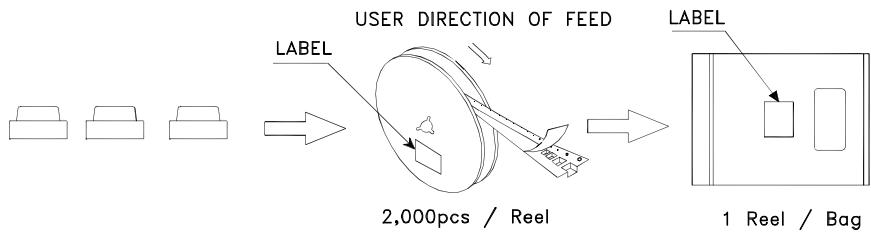


A-A SECTION

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PACKING & LABEL SPECIFICATIONS

APGA1602CGC/KA



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