

Part Number: APG1005SYC-T

Super Bright Yellow

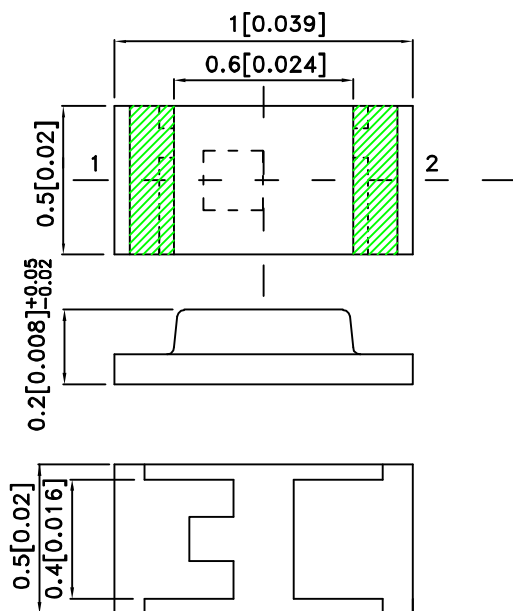
Features

- 1.0mmX0.5mm SMT LED, 0.2mm thickness.
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

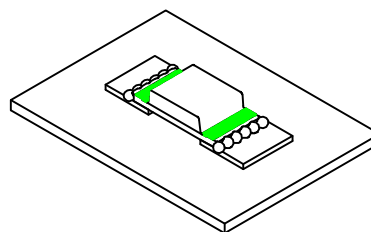
Description

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

Package Dimensions



1 ○ —|> ○ 2



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 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.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APG1005SYC-T	Super Bright Yellow (AlGaInP)	Water Clear	55	100	120°

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
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
Ir	Reverse Current	Super Bright Yellow		10	uA	VR=5V

Notes:

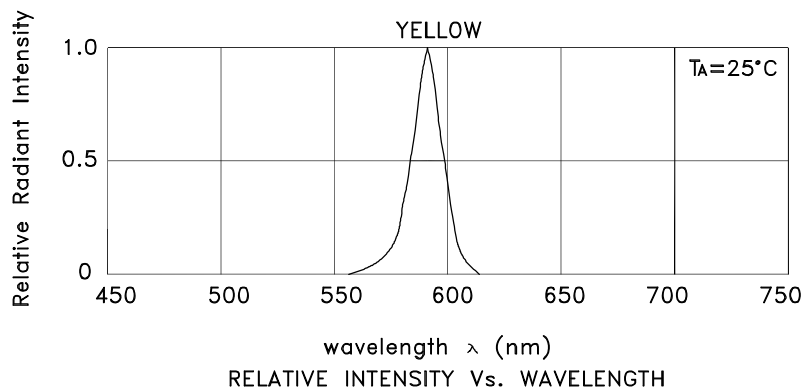
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

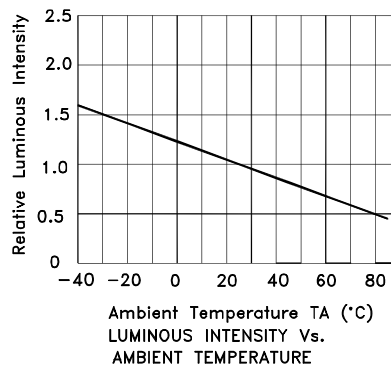
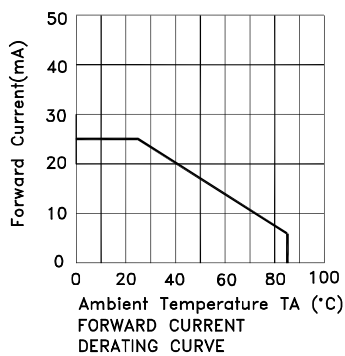
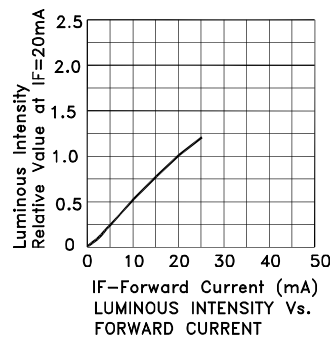
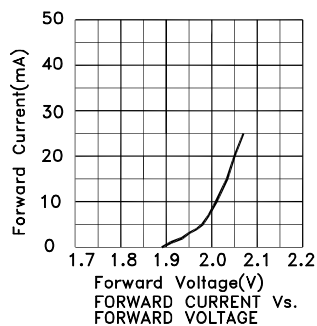
Parameter	Super Bright Yellow	Units
Power dissipation	60	mW
DC Forward Current	25	mA
Peak Forward Current [1]	120	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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



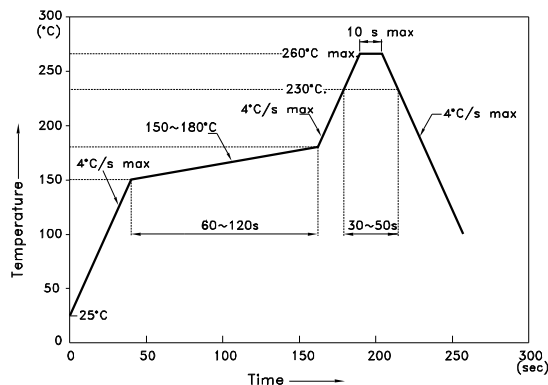
Super Bright Yellow APG1005SYC-T



APG1005SYC-T

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.

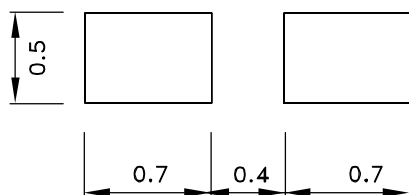
Reflow Soldering Profile For Lead-free SMT Process.



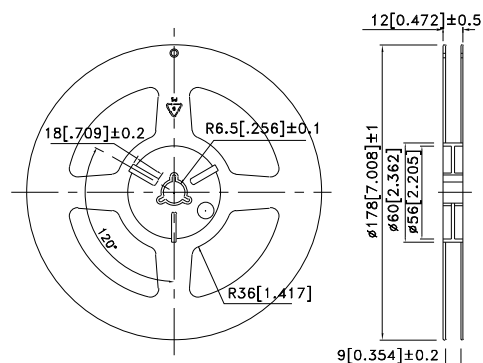
NOTES:

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.

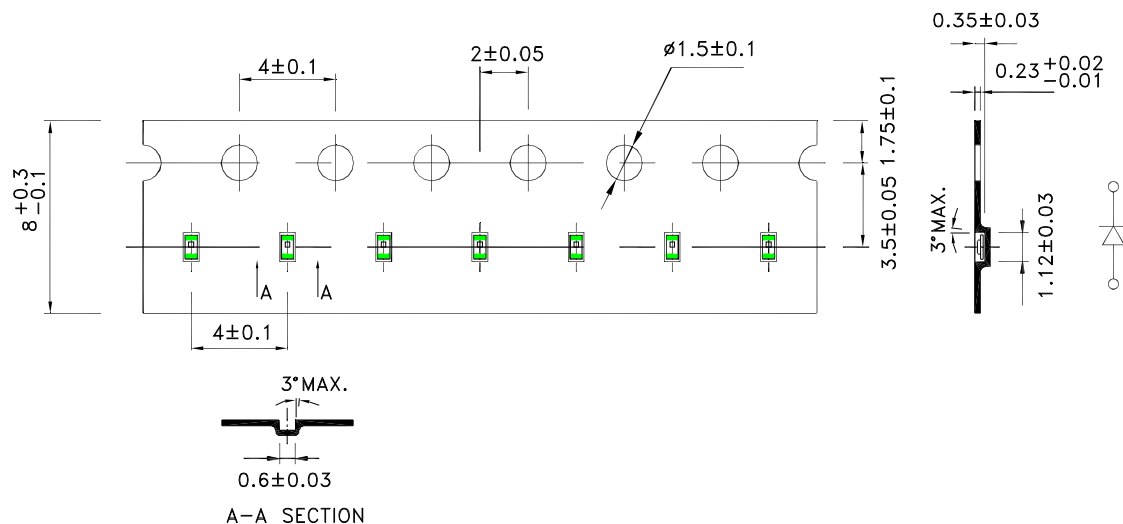
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

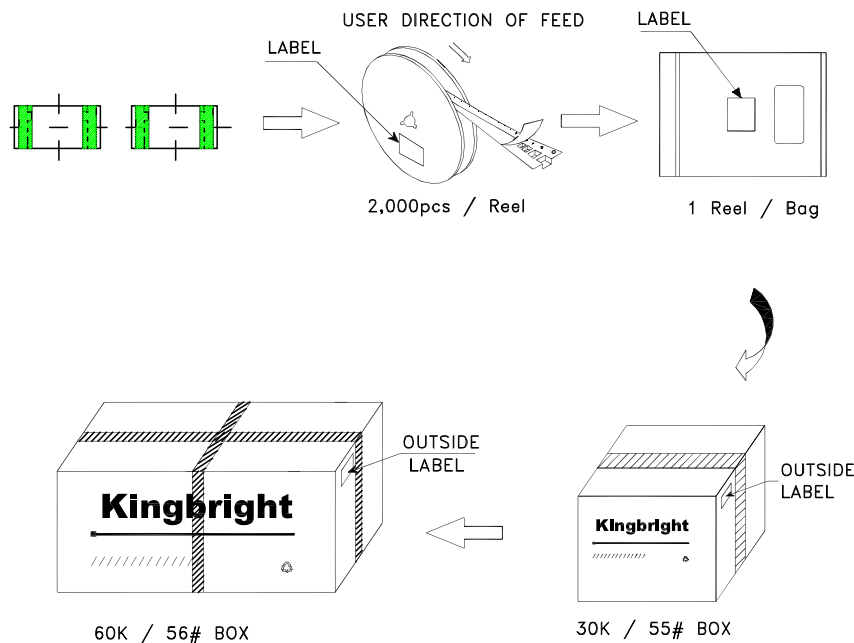



Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APG1005SYC-T



Kingbright		
P/N0: APG1005xxx		
QTY: 2000 pcs	Q.C.	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; text-align: center;"> Q C XX XX XXXX PASSED </div>
S/N: XXXX		
CODE: XXX		
LOT NO:		
 XXXXXXXXXXXXXXXXXXXX		
RoHS Compliant		

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