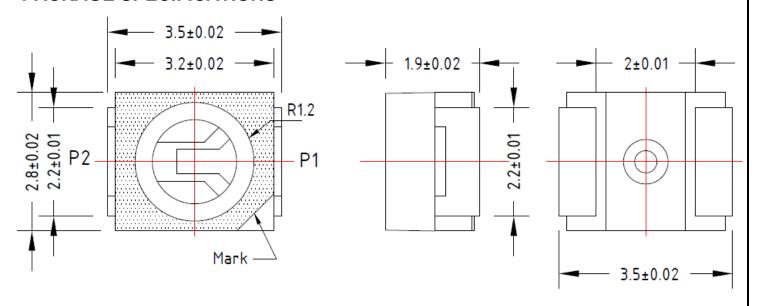
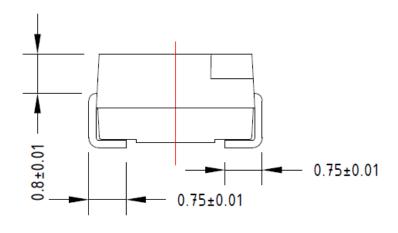


3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

## **PACKAGE SPECIFICATIONS**





Item	Materials	
Package	Heat-Resistant Polymer	
Encapsulating Resin	Silicone	
Electrodes	Ag Plating Copper Alloy	

#### NOTES:

- 1. All dimensions in mm
- 2. Electrical connection between all cathodes is recommended
- 3. Specifications are subject to change without notice

Chip Material	Chip Emitted	Lens Color	Viewing Angle
InGaN	Pure Green	Water Clear	120



3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

**ABSOLUTE MAXIMUM RATINGS** 

 $(Ta=25^{\circ}C)$ 

Parameter	Symbol	Ratings	Unit
DC Forward Current	I <sub>F</sub>	30	mA
Peak Pulsed Forward Current	I <sub>FP</sub>	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	Pd	72	mW
Operating temperature range	Topr	-30~+100	°C
Storage temperature range	Tstg	-40~+100	°C
Solder Dipping Temperature	Tsld	265°C for 10 sec	

## **OPTICAL-ELECTRICAL CHARACTERISTICS**

(Ta=25°C)

Parameter	Symbol	Condition	Min	Тур	Max	Unit
Forward Voltage	$V_{\mathrm{F}}$	If=20mA		3.2	3.8	V
Luminous Flux	ФV			3500		mlm
Luminous Intensity	$I_{V}$		880	1200		mcd
Dominant Wavelength	λd		515	525	535	nm
Peak Wavelength	λρ			515		nm
Spectral Half Width	Δλ1/2			28		nm

- Measurement Uncertainty of Luminous Intensity: ±10%
- Please refer to CIE 1931 chromaticity diagram



3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

## **Luminous Intensity Bin Table**

#### IF=20mA

Rank Name	Min (mcd)	Max (mcd)
P	880	1150
Q	1150	1500
R	1500	1900
S	1900	2500

Tolerance for each bin limit is ±15%

### **Color Bin Table**

#### IF=20mA

Rank Name	Min (nm)	Max (nm)
1	515	520
2	520	525
3	525	530
4	530	535

Tolerance for each bin limit is ±1nm

#### Notes:

1. One delivery will include several color ranks and  $\ensuremath{I_{\nu}}$  ranks of products.

The quantity-ratio of the different rank is decided by AOP.

2. Bin Name typed on the Label: IV RANK + Color Rank.

For Example, BIN S2 Means IV: 1900 ~ 2500mcd, Color:520~525nm

3. Static Electricity or Surge Voltage damages the LEDs.

It is recommended to use a wrist band or Anti-Electrostatic glove when handling the LEDs.

4. AOP has the right to update the information without notice.

Please double confirm the Spec details before placing an order

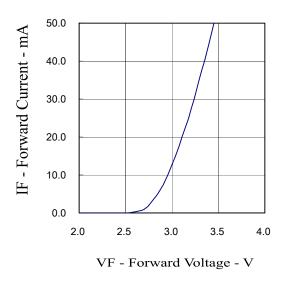


3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

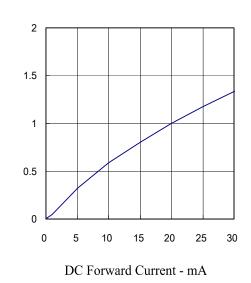
Relative Intensity (Normalized at 20 mA)

### TYPICAL ELECTRICAL-OPTICAL CHARACTERISTIC CURVES

Forward Current vs. Forward Voltage

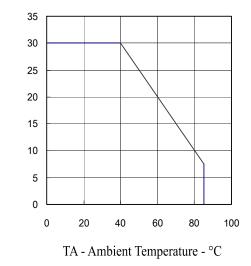


Relative Intensity vs. Forward Current

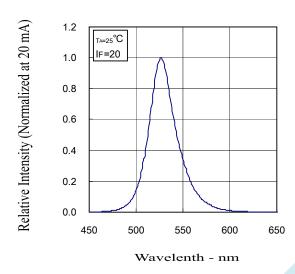


Forward Current vs. Ambient Temperature





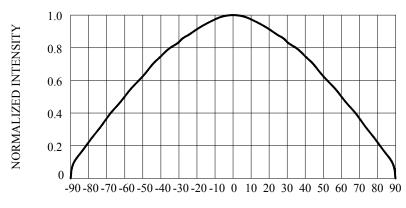
Relative Intensity vs. Wavelength





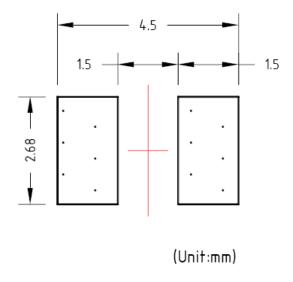
3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

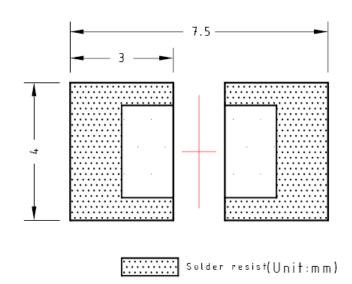
## **RADIATION PATTERN**



#### ANGULAR DISPLACEMNT-DEGREES

## RECOMMENDED SOLDERING PATTERN

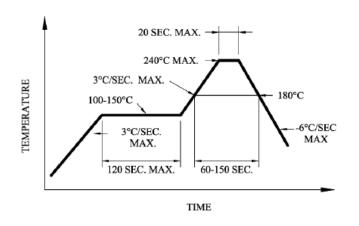


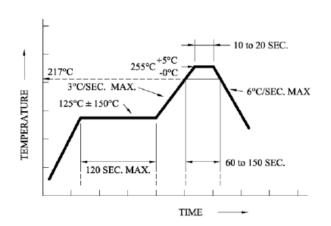




3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

### **SOLDERING CONDITIONS**



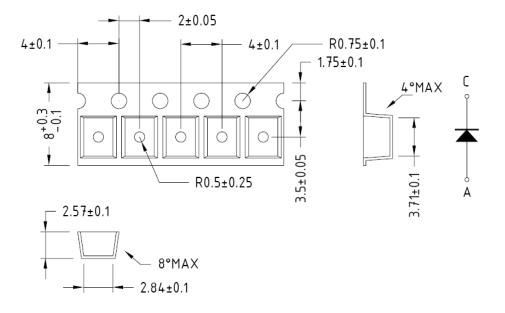


### Recommended reflow soldering profile

Recommended Pb-free reflow soldering profile.

- Repairing should not be done after the LEDs have been soldered. When repairing is
  unavoidable, a double-head soldering iron should be used. It should be confirmed
  beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.
- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.

### TAPE DIMENSION



Version 1.0 Date: 6/10/13 American Opto Plus LED Corp.

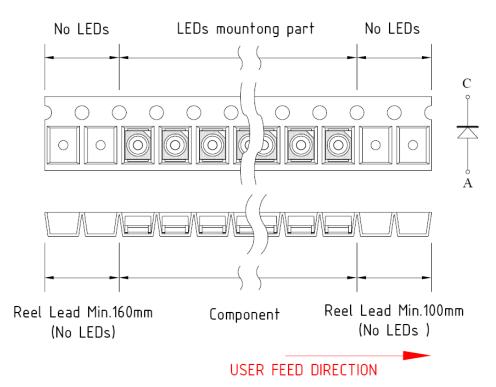
Specifications are subject to change without notice.

1206 E. Lexington Ave., Pomona CA 91766 Tel: 909-465-0080 Fax: 909-465-0130 <a href="www.aopled.com">www.aopled.com</a>

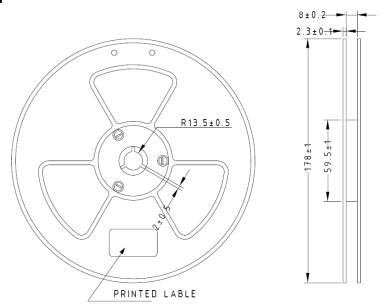


3.5 x 2.8 x 1.9 mm Pure Green PLCC2 LED

### TAPE LEADER AND TRAILER DIMENSION



### **REEL DIMENSION**



Note: Baking is required under the following conditions:

The pack has been opened for more than four weeks.

Baking recommended conditions:

 $60 \pm 5$  °C for 20 hours. Reel Size: 2000 pcs