

### **Technical Data Sheet**

MODEL NO: S3030ANG4P-6V-PLK 3030 Package 3.0\*3.0\*0.6mm Top LEDs

### Features:

• Package in 8mm tape on 7" diameter reel

• Compatible with automatic placement equipment

• Compatible with reflow solder process

### Applications:

Indicators

• Automotive: backlighting in dashboard and switch

Backlight for LCD

Dice material	Emitted color	Lens Color
InGaN	Pure-green	Water Clear

### Electrical/Optical Characteristics(Ta=25 $^{\circ}$ C)

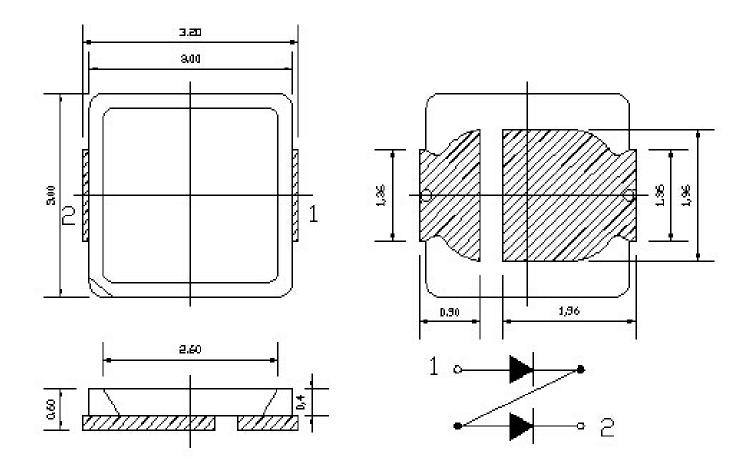
Parameter	Test	Symbol	Value			l lm:t
	Condition		Min	Тур	Max	Unit
Wavelength	IF=150mA	λd	520	525		nm
Forward voltage	I <sub>F</sub> =150mA	VF	6.0		7.0	V
Luminous intensity	I <sub>F</sub> =150mA	lv	12000		15000	mcd
Luminous Flux	I <sub>F</sub> =150mA	$\varphi$	40		50	lm
Viewing angle at 50% lv	I <sub>F</sub> =150mA	2 <i>\theta</i> 1/2		120		Deg
Reverse current	V <sub>R</sub> =5V	lr			10	μΑ

### Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	1000	mW
Forward current	lF	150	mA
Reverse voltage	Vr	5	V
Operating temperature range	Тор	-20 ~+80	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+80	$^{\circ}\!\mathbb{C}$
Peak pulsing current (1/10 duty f=1kHz)	IFP	150	mA



# PACKAGING DIMENSIONS (mm):



## NOTES:

- 1, All dimensions are in millimeters (inches);
- 2. Tolerances are  $\pm 0.2 mm$  (0.008inch) unless otherwise noted  $^{\circ}$

#### 2016MAY25Y



## **Typical Electro-Qptical Characteristics Curve:**

Fig 1. Forward Current vs. Forward Voltage

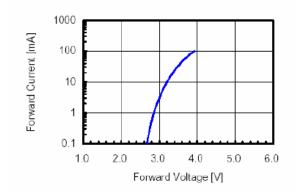


Fig 3. Forward Voltage vs. Temperature

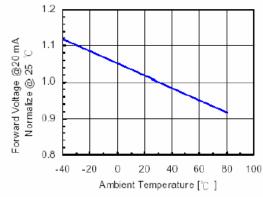


Fig 5.Relative Intensity vs. Wavelength

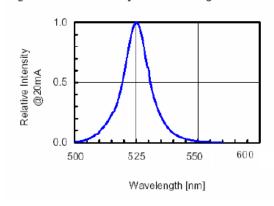


Fig 2. Relative Intensity vs. Forward Current

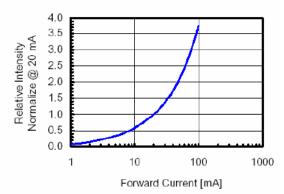
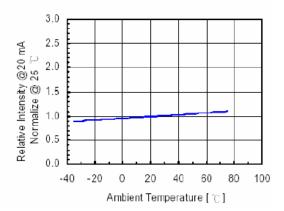


Fig 4. Relative Intensity vs. Temperature



### **Precautions For Use:**

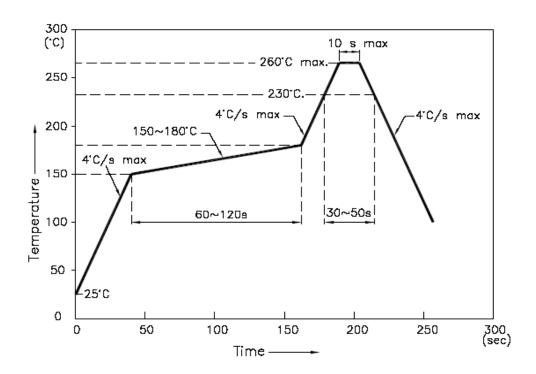
#### Over - current - proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)

### Storage

- 1. The operation of temperature and R.H. are :  $5^{\circ}$ C  $\sim 30^{\circ}$ C, 60%R.H. Max.
- 2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating regent. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date).
- 3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The condition is :  $60^{\circ}\text{C}\pm5^{\circ}\text{C}$  for 15hrs.

### ■ Reflow Temp/Time



#### NOTES:

- 1. We recommend the reflow temperature  $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$ .the maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
- 2. dont cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

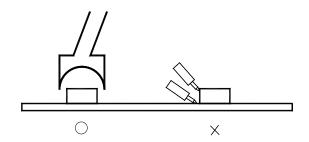


### ■Soldering iron

Basic spec is  $\leq$  5sec when 260°C. If temperature is higher, time should be shorter (+10°C  $\rightarrow$  -1sec ). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under 230°C.

#### **■**Rework

- 1. Customer must finish rework within 5 sec under 260°C.
- 2. The head of iron can not touch copper foil
- 3. Twin-head type is preferred.



■ Avoid rubbing or scraping the resin by any object, during high temperature, for example reflow \ solder etc.

### Packaging specifications

