

Technical Data Sheet

MODEL NO: S5050ANW4P-M

5050 Package 5.0*5.0mm Chip LEDs

Features:

- 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	Cool White	Yellow Fluorescent		

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

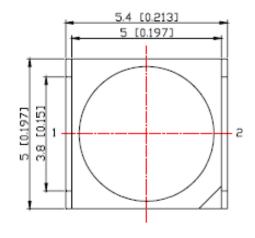
Parameter	Test	Symbol	Value			Unit
	Condition		Min	Тур	Max	UIIIL
Color Temperature	I _F =150mA	CCT		6200		K
Forward voltage	I _F =150mA	VF	3.0		3.8	V
Color Rendering Index	I _F =150mA	Ra	80			
Luminous intensity	I _F =150mA	lv	15000		22000	mcd
Luminous Flux	I _F =150mA	Lm		50		lm
Viewing angle at 50% Iv	I _F =150mA	2 <i>\theta</i> 1/2		120		Deg
Reverse current	V _R =5V	lr			10	μΑ

Absolute Maximum Ratings(Ta=25°C)

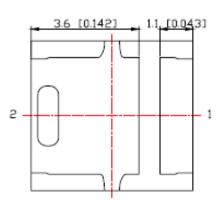
Parameter	Symbol	Value	Unit
Power dissipation	Pd	500	mW
Forward current	lF	150	mA
Reverse voltage	VR	5	V
Operating temperature range	Тор	-40 ~+85	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+85	$^{\circ}\!\mathbb{C}$
Peak pulsing current (1/8 duty f=1kHz)	I FP	125	mA



PACKAGING DIMENSIONS (mm):

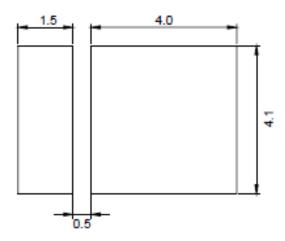




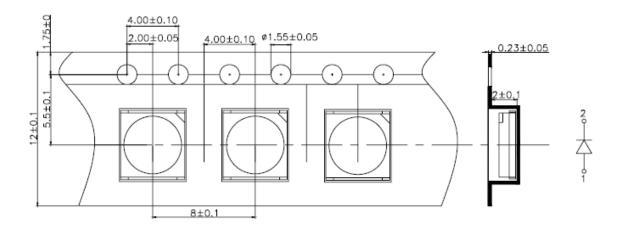












Precautions For Use:

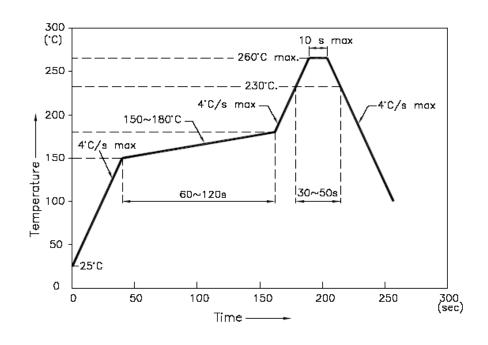
Over - current - proof

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 : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$, 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:

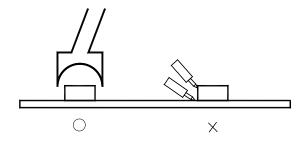
- 1. We recommend the reflow temperature $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$.the maximum soldering temperature should be limited to 260°C .
- 2. dont cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

■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.