

## **Technical Data Sheet**

### MODEL NO: S5730QLX4P-H34

0.5w 5.7 x 3.0mm White SMD

### Features

●Package: 2500pcs per reel

•Compatible with automatic placement equipment

•Compatible with reflow solder process

Applications:

Indicators

•Automotive : backlighting in dashboard and switch

Part Number	Dice material	Emitted color	Lens Color
S5730QLW4P-H34		White	
S5730QLPW4P-H34	InGaN	Pure-White	Yellow diffused
S5730QLPWW4P-H34		Warm White	

### Electrical/Optical Characteristics(Ta=25°C)

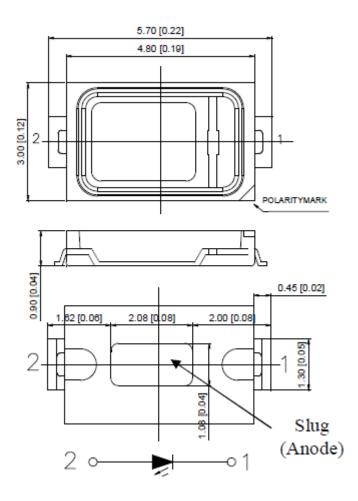
Parameter		Test	Symbol	Value			Unit
		Condition Symbol	Min	Тур	Max	Unit	
Luminous Flux	(Cool White)	IF=150mA	arphi (lm)	53		58	lm
Luminous Flux	(Pure White)	IF=150mA	arphi (lm)	53		58	lm
Luminous Flux	(Warm White)	IF=150mA	arphi (lm)	50		55	lm
Color Temperature	(Cool White)	IF=150mA	ССТ	5700	6000	6500	К
Color Temperature	(Pure White)	IF=150mA	ССТ	3800	4000	4250	К
Color Temperature	(Warm White)	IF=150mA	ССТ	2800	3000	3100	К
Color Rendering Index		IF=150mA	Ra	70			-
Forward voltage		IF=150mA	VF	2.8		3.6	V
Viewing angle		IF=150mA	2 <i> </i>		120		Deg
Reverse current		VR=5V	lr			10	μΑ



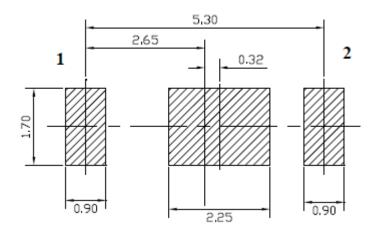
## Absolute Maximum Ratings(Ta= $25^{\circ}C$ )

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	°C
Storage temperature range	Tstg	-40 ~+100	°C
Peak pulsing current (1/10 duty f=1kHz)	FP	200	mA

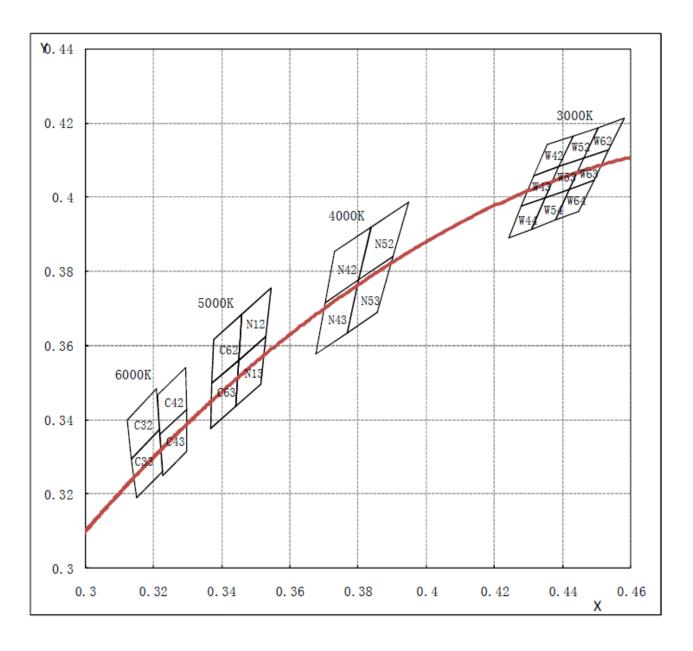
## PACKAGING DIMENSIONS (mm):





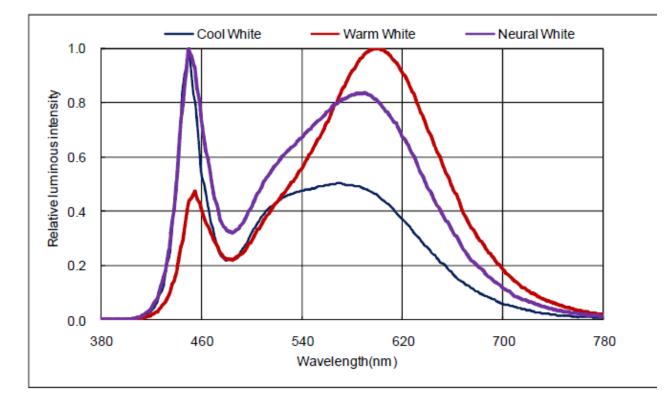




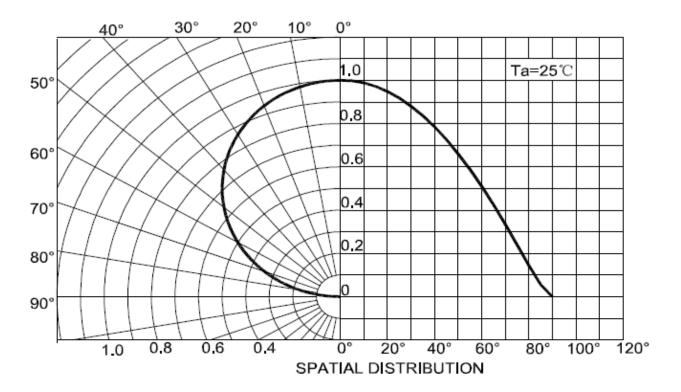




Relative spectral emission



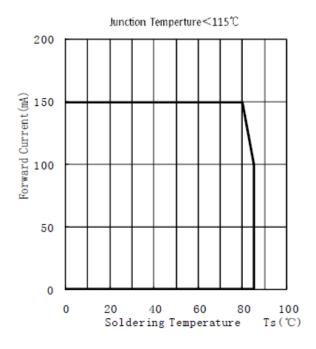
Radiation diagram

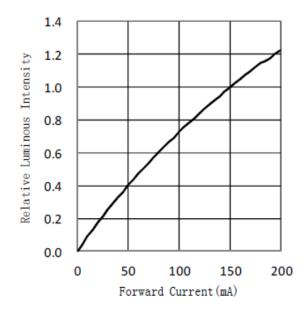




### Soldering Temperature vs. Forward Current

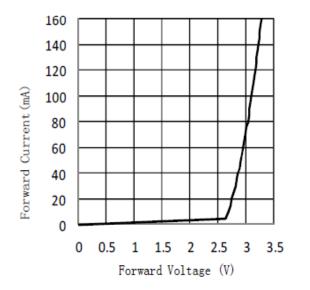
Forward Current VS. Relative Intensity

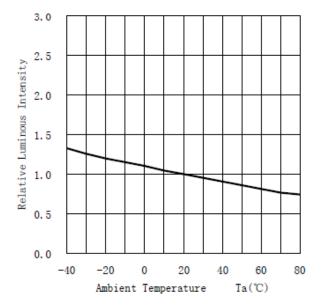




Forward Voltage VS. Forward Current

Ambient Temperature VS. Relative Intensity







### **Precautions For Use :**

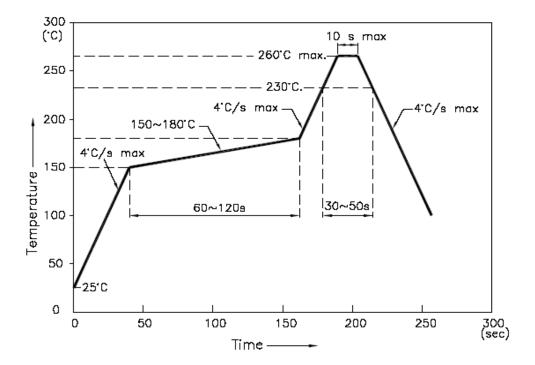
### **Over - current - proof**

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 ~  $30^{\circ}$ C ,  $60^{\circ}_{0}$ 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 :  $60^{\circ}C\pm5^{\circ}C$  for 15 hrs.
- Reflow Temp/Time



### NOTES:

- 1. We recommend the reflow temperature  $245 \,^{\circ}C(\pm 5 \,^{\circ}C)$ .the maximum soldering temperature should be limited to  $260 \,^{\circ}C$ .
- 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.

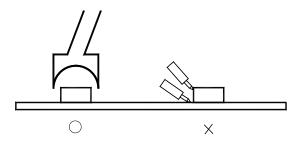


### ■Soldering iron

Basic spec is  $\leq 5$  sec 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  $260^{\circ}$ 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.