

### **Technical Data Sheet**

MODEL NO: S150G8S4 1206Package 3.2\*1.6mm Chip 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)

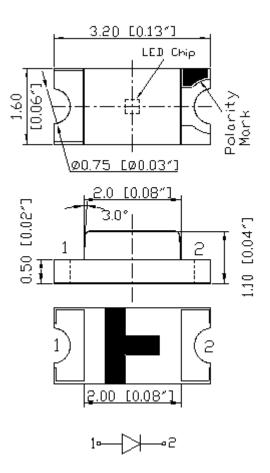
Parameter	Test	Cumbal	Value			Unit
	Condition	Symbol Condition	Min	Тур	Max	Unit
Spectral half bandwidth	IF=20mA	Δλ		33		nm
Dominant wavelength	IF=20mA	λD	520	525	530	nm
Forward voltage	IF=20mA	VF	2.8	3.2	3.7	V
Luminous intensity	IF=20mA	lv	320	500	800	mcd
Viewing angle at 50% Iv	IF=10mA	2 <del>0</del> 1/2		140		Deg
Reverse current	V <sub>R</sub> =5V	lr			10	μА

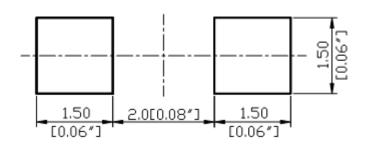


### Absolute Maximum Ratings(Ta=25 $^{\circ}$ C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	75	mW
Forward current	lF	30	mA
Reverse voltage	VR	5	V
Operating temperature range	Тор	-40 ~+80	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+85	$^{\circ}\!\mathbb{C}$
Peak pulsing current (1/8 duty f=1kHz)	lfP	125	mA

# PACKAGING DIMENSIONS (mm):





#### **Precautions For Use:**

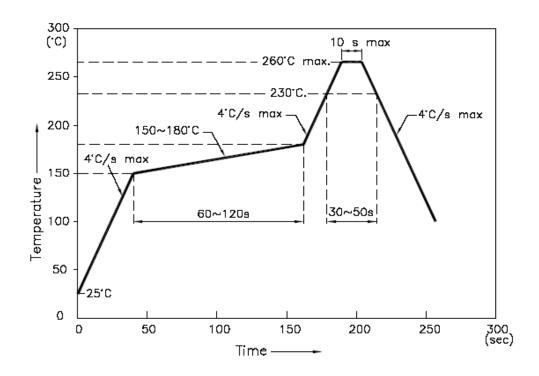
#### Over - current - proof

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 :  $5^{\circ}$ 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  $245^{\circ}\mathbb{C}(\pm 5^{\circ}\mathbb{C})$ . the maximum soldering temperature should be limited to  $260^{\circ}\mathbb{C}$ .
- 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.

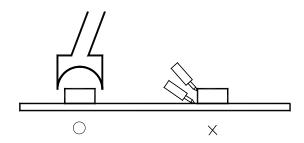


#### ■Soldering iron

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.