

### **Technical Data Sheet**

### MODEL NO: S2033ANB /ANG4

#### 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	Green	
		Water transparent
InGaN	Blue	

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

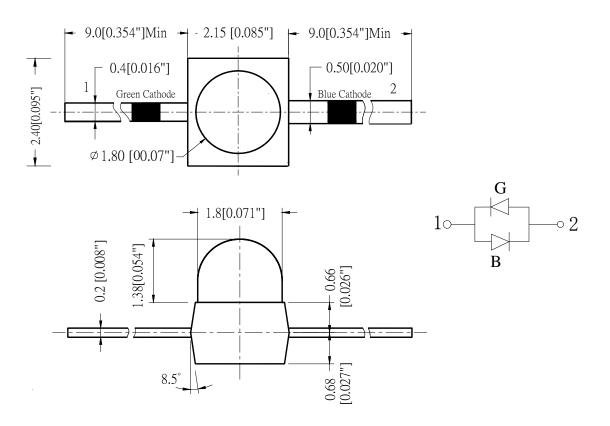
Parameter	Test Condition Sym	Sumbol		Value			l lmit
		Symbol	Symbol		Тур	Max	Unit
Spectral half bandwidth	IF=20mA	$ riangle \lambda$	G		34		nm
			В		24		
Dominant wavelength	IF=20mA	λD	G	520	525	530	nm
			В	460	465	470	
Forward voltage	IF=20mA	VF	G	2.8	3.2	3.7	V
			В	2.8	3.2	3.7	
	IF=20mA	lv	G	2400	4500	6800	mcd
Luminous intensity			В	500	950	1600	
Viewing angle at 50% Iv	If=10mA	2 <i>0</i> 1/2			20		Deg
Wavelength at peak emission	lf=20mA	λ peak	G		520		nm
			В		460		



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

Parameter	Symbol	Va	Unit	
		G	В	
Power dissipation	Pd	111	111	mW
Forward current	lf	3	mA	
Operating temperature range	Тор	-40 ~+80		°C
Storage temperature range	Tstg	-40 ~+85		°C
Peak pulsing current (1/8 duty f=1kHz)	<b>I</b> FP	1:	mA	

## PACKAGING DIMENSIONS (mm):





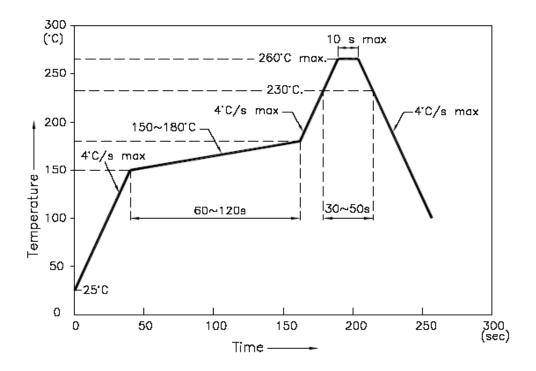
### **Precautions For Use :**

#### **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 ~  $30^{\circ}$ 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 :  $60^{\circ}C\pm 5^{\circ}C$  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 ≤ 5sec when 260°C. If temperature is higher, time should be shorter (+10°C → -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.

