YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO：S5050ANWW4-M **5050Package 5.0*5.0*1.6mm TOP LED**

Features：

- 5.0 x 5.0mm Top LED
- 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	Warm White	Red phosphor

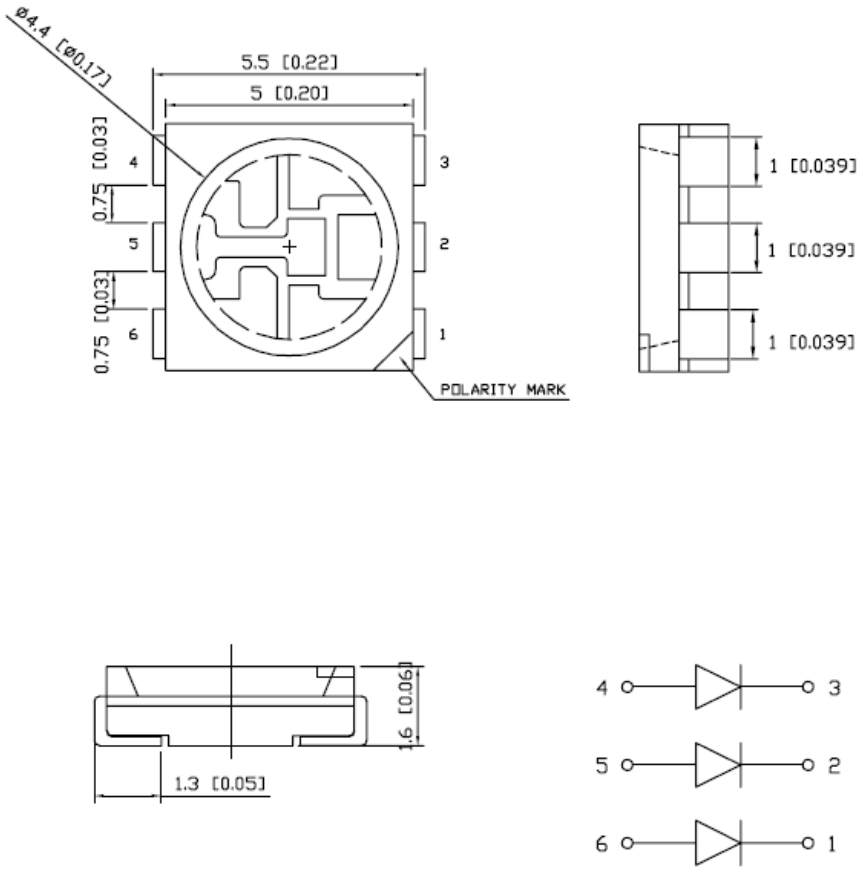
Electrical/Optical Characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Luminous Intensity	Iv	IF=60mA/three chips	6060		9000	mcd
Color Temperature	Tc	IF=60mA/three chips		3000		K
Chromaticity Coordinates	X			0.44		
	Y			0.41		
Color Rendering Index	Ra		80			
Lumen	¢	IF=60Ma/three chips		16		lm
Viewing Angle	2Θ1/2	IF=20mA/chip		120		Deg
Forward Voltage	VF	IF=20mA/chip	2.8		3.6	V
Reverse Current	IR	VR=5V			10	μA

Absolute Maximum Ratings(Ta=25℃)

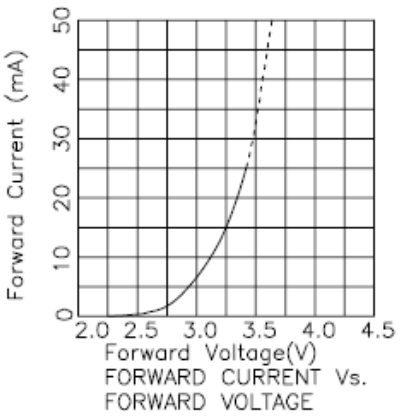
Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	120	mW
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	IF(Peak)	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-40 to +85	℃
Storage Temperature Range	Tstg	-40 to +85	℃

◆ Package Dimensions

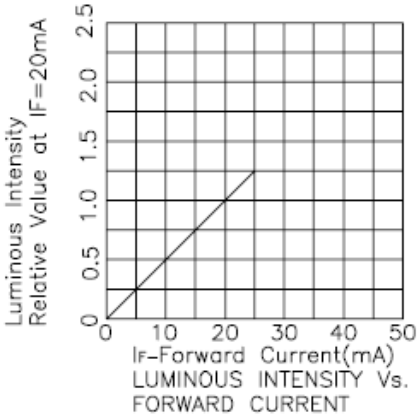


Notes:
1. All dimensions are in millimeters.
2. Tolerance is ±0.25 unless otherwise noted.
3. Specifications are subject to change without notice.

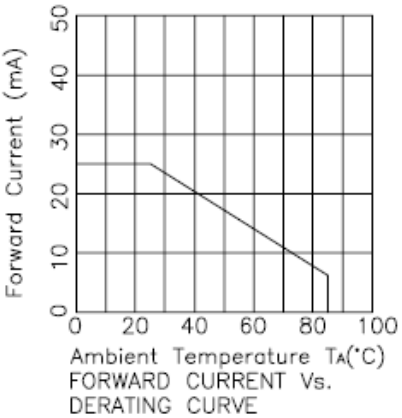
Typical Electrical/Optical Characteristics Curves



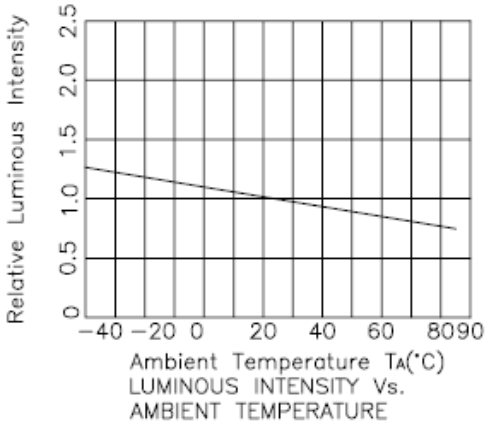
FORWARD CURRENT Vs.
FORWARD VOLTAGE



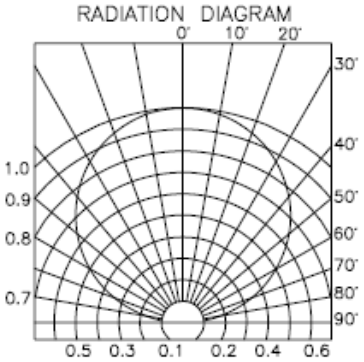
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT Vs.
DERATING CURVE

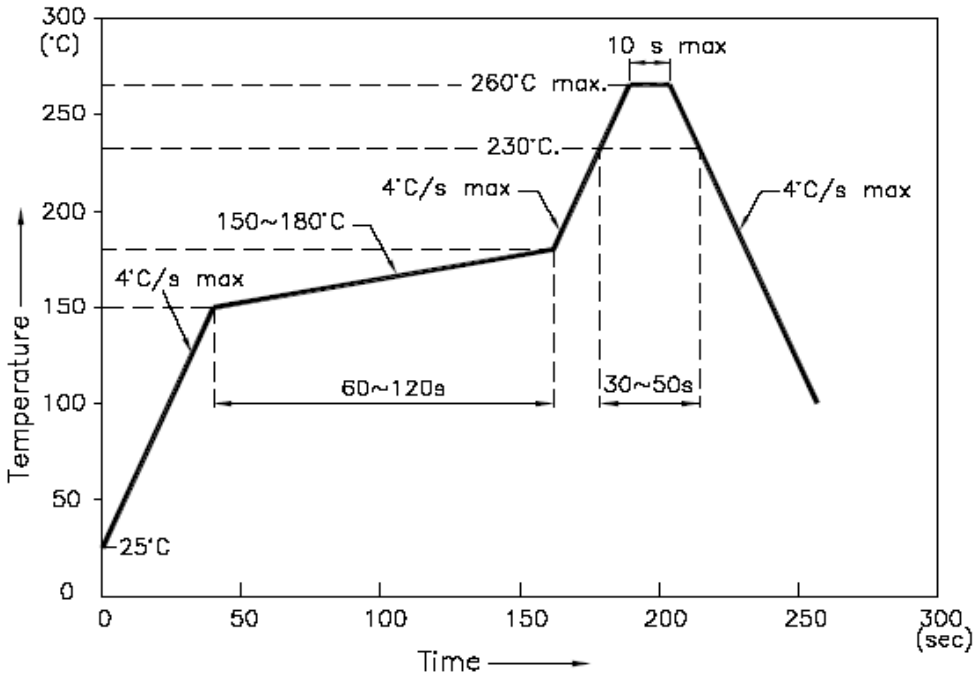


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



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℃～30℃, 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℃±5℃ for 15hrs.

■ Reflow Temp/Time



NOTES:

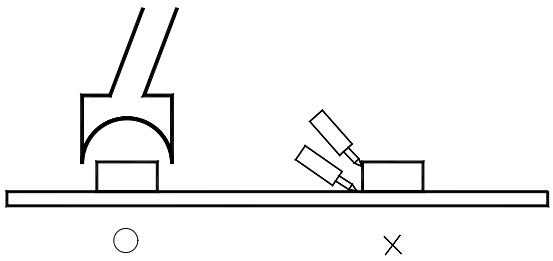
1. We recommend the reflow temperature 245℃(±5℃).the maximum soldering temperature should be limited to 260℃.
2. don’t cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■Soldering iron

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

■Rework

1. Customer must finish rework within 5 sec under 260℃.
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.**