



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO S5060ANW4

5060 Package 5.0*6.0mm TOP LED

Features

- 5.0 x 6.0mm Top LED
- Compatible with phosphor
- Compatible with reflow
- Package: 1000 pieces per

Applications

- Indicators
- Automotive backlighting in dashboard and switch
- Backlight for LCD

Die material	Emitted color
InGaN	White Water Clear

Electrical/Optical Characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min	Typ	Max
Luminous Intensity	Iv	IF= 20mA *3	4900	8000	
Dominant Wavelength	λd	IF= 20mA *3			
Color Temperature	Tc	IF= 20mA *3		6500	
Peak Emission Wavelength	λp	IF= 20mA *3 x : 0.310 y : 0.320			
Viewing Angle	2θ1/2	IF= 20mA *3		120	
Forward Voltage	VF	IF= 20mA *3	3.0	3.3	
Reverse Current	VR	VR = 5V			10

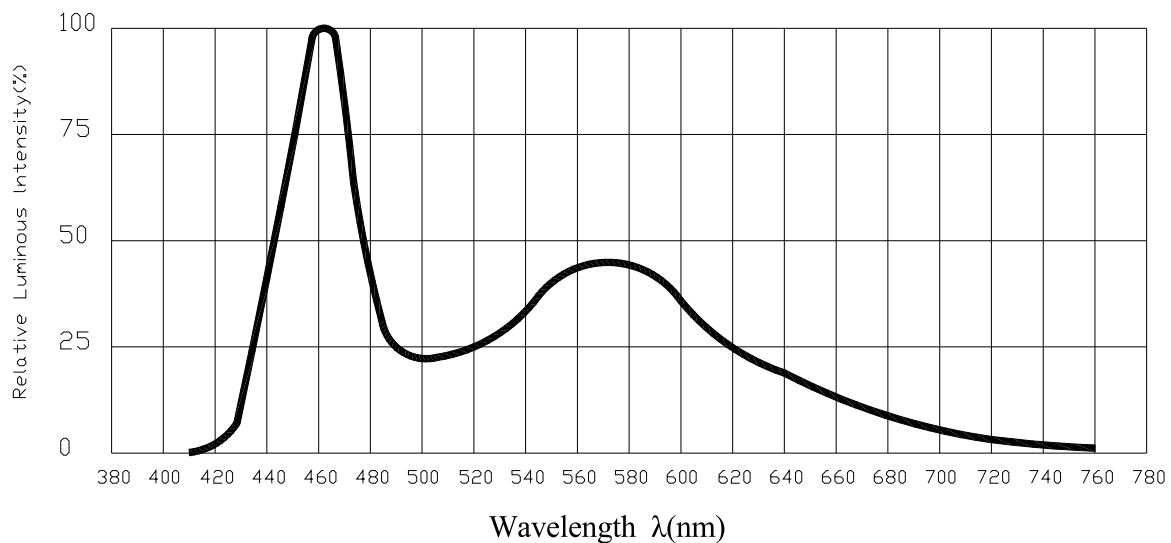
Absolute Maximum Ratings (Ta = 25 °C)

Parameter	Symbol	Maximum
Power Dissipation	Pd	315 mW
Peak Forward Current (1/10 Duty Cycle) (Peak Pulse Width)	IF(pk)	300 mA
Continuous Forward Current	IF	30 mA
Reverse Voltage	VR	5 V
Derating Linear From 25 °C		0.3 mA / °C
Operating Temperature Range	To pr	-30 to +80
Storage Temperature Range	Ts tg	-40 to +90

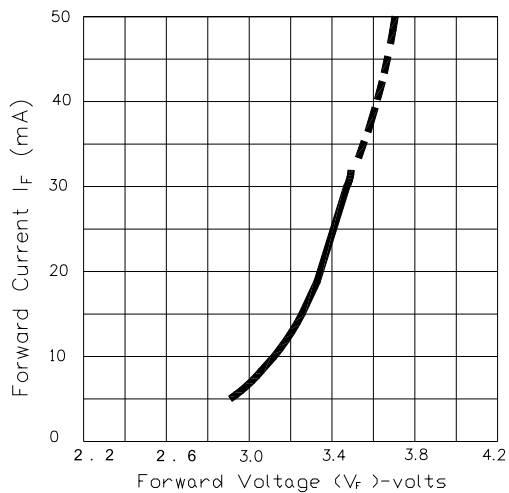


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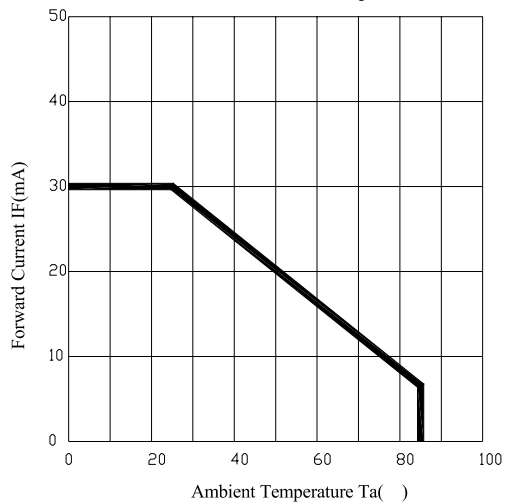
Spectrum Distribution



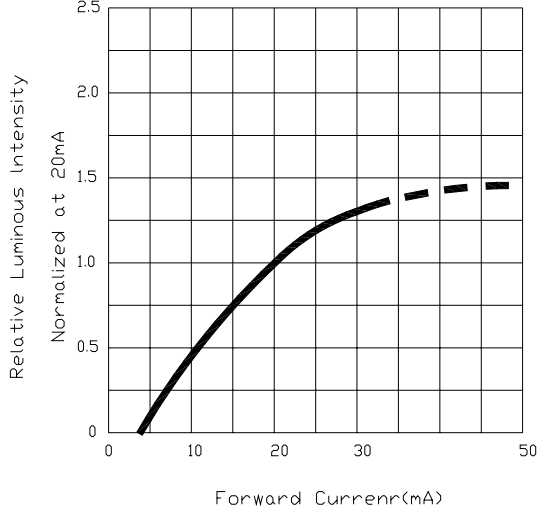
Forward Current Vs. Forward Voltage $T_a=25^\circ\text{C}$



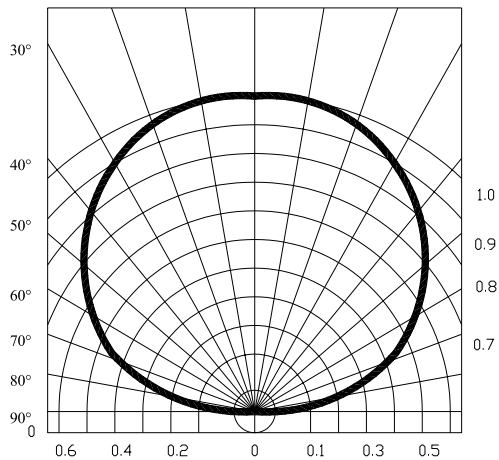
Forward Current Derating Curve



Luminous Intensity Vs. Forward Current $T_a=25^\circ\text{C}$



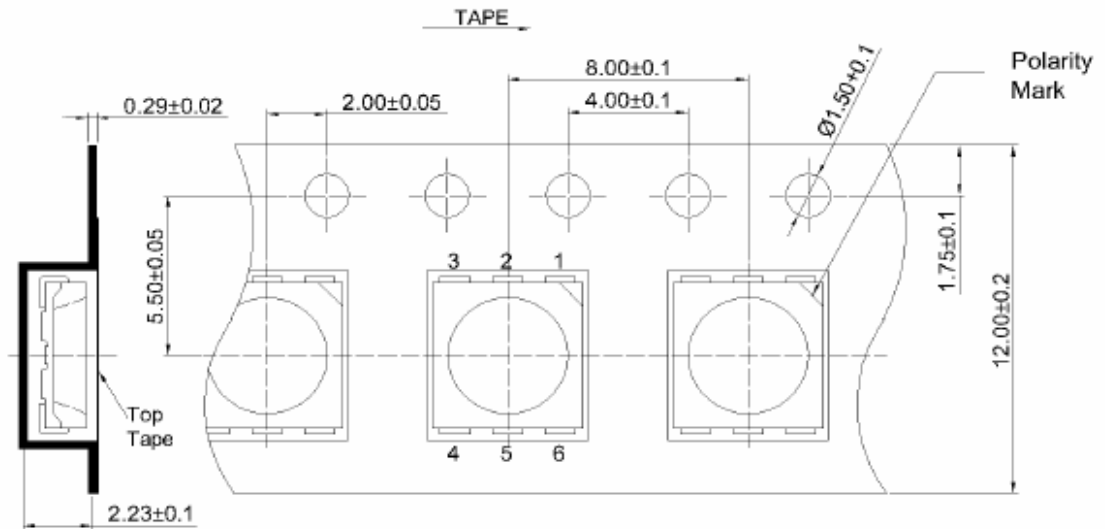
Radiation Diagram $T_a=25^\circ\text{C}$



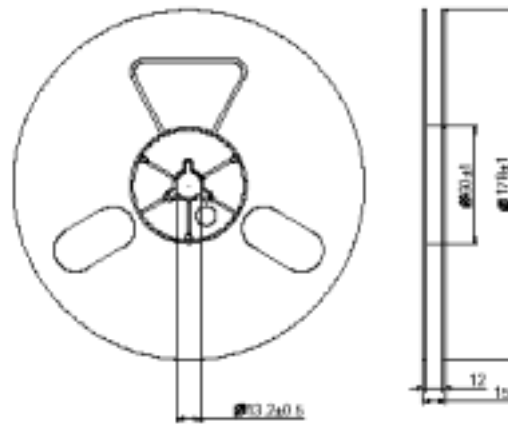


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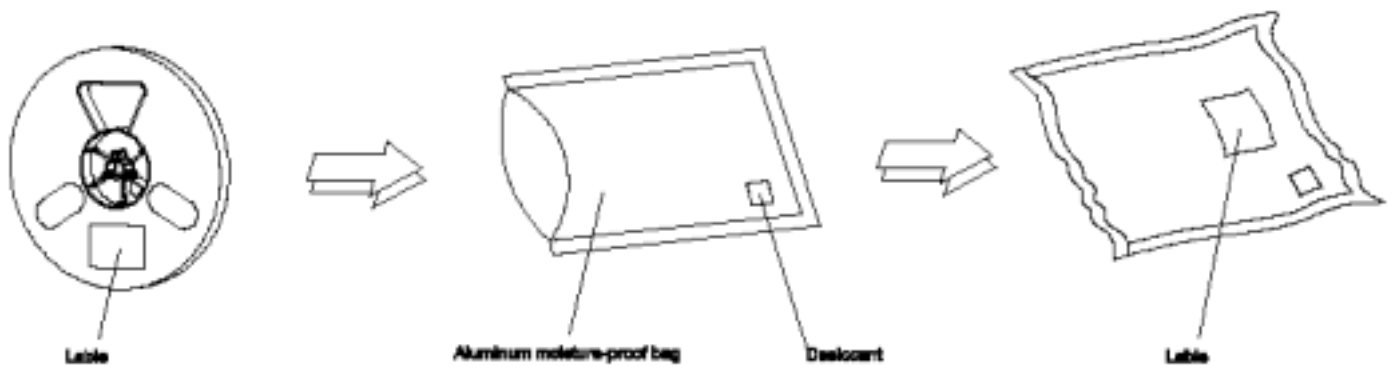
Tape Specifications (Units : mm)



Reel Dimensions



Moisture Resistant Packaging





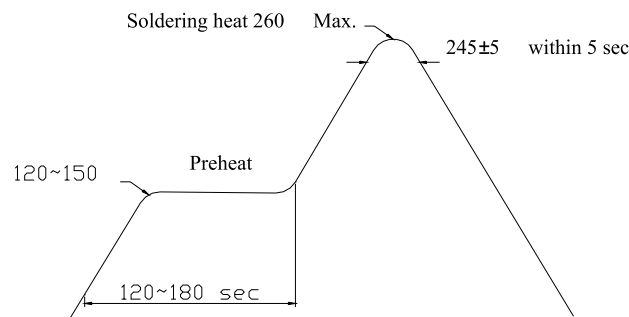
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● Descriptions

- The Chip-LED Taping is much smaller than lead frame type components, thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained.
- Besides, lightweight makes them ideal for miniature application, etc.

● Soldering heat reliability DIP

Please refer to the following figure



● Precautions For Use

- Over- current- proof

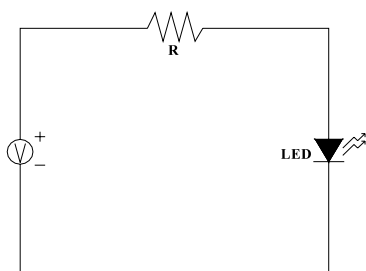
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change Burn out will happen

- Storage

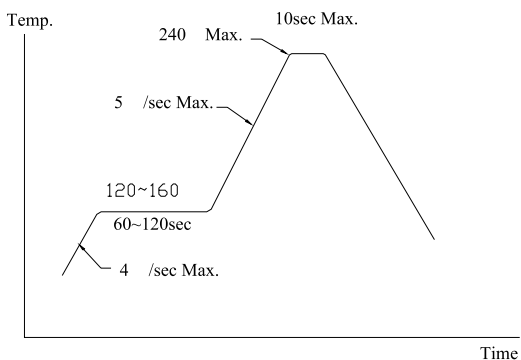
1. The operation of temperature and R.H. are 5 30 , 60 R.H. Max..
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating reagent. Considering the tape life, we suggest our customers to use our products within 1.5 year 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.



● Test Circuit



● Reflow Temp/ Time



● Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.

No.	Items	Test Condition	Test Hours/Cycles	Sample Size
1	Solder Heat	TEMP 260 ±5	5 sec	48 pcs
2	Temperature Cycle	90 ~ 25 ~ -30 ~ 25 30m 5m 30m 5m	300Cycles	48 Pcs
3	Thermal Shick	100 ~ -55 10m 10m	100Cycles	48 Pcs
4	Operation Life	If=20mA	1000 Hrs	48 Pcs
5	High Temperature Storage	Temp:90	1000Hrs	48 Pcs
6	Low Temperature Storage	Temp:-30	1000Hrs	48 Pcs
7	High Temperature/High Humidity	80 / R.H80%	1000Hrs	48 Pcs