YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO：197ANB/ANG/UR4-G **0605 Package 1.5*1.6mm Chip LEDs**

Features：

● 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	Blue	Water clear
InGaN	Green	
AlGaInP	Red	

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Test Condition	Symbol		Value			Unit
				Min	Typ	Max	
Wavelength at peak emission	If=20mA	λ peak	R		630		nm
			G		520		
			B		560		
Spectral half bandwidth	If=20mA	△λ	R		18		nm
			G		32		
			B		22		
Dominant wavelength	If=20mA	λ dom	R	615	620	630	nm
			G	520	525	530	
			B	460	465	470	
Forward voltage	If=20mA	Vf	R	1.7	2.0	2.5	V
			G	2.5	2.6	3.4	
			B	2.5	2.6	3.4	
Luminous intensity	If=20mA	Iv	R	32	55	100	mcd
			G	160	250	500	
			B	20	35	63	
Viewing angle at 50% Iv	If=10mA	2θ 1/2			140		Deg
Reverse current	Vr=5V	Ir				10	μA

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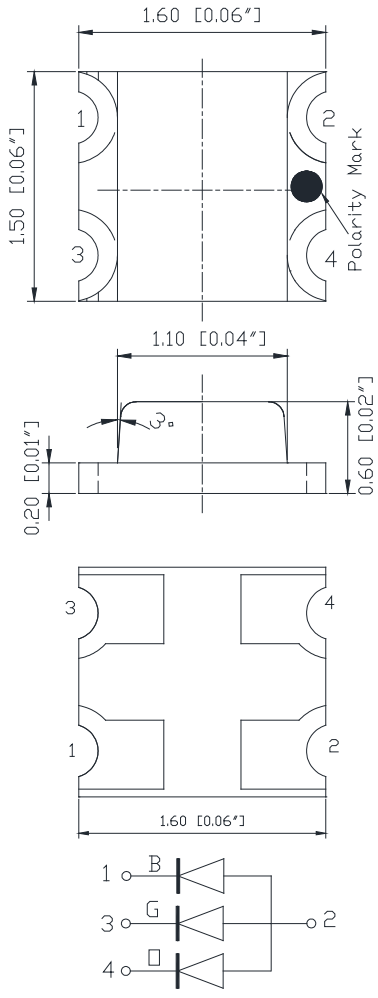
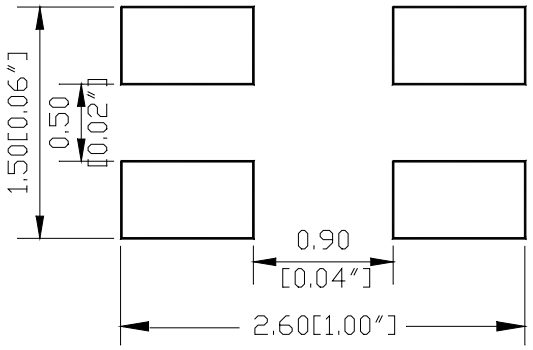
Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Value			Unit
		R	B	G	
Power dissipation	Pd	75	102	102	mW
Forward current	If	30			mA
Reverse voltage	Vr	5			V
Operating temperature range	Top	-40 ~+80			℃
Storage temperature range	Tstg	-40 ~+85			℃
Peak pulsing current (1/8 duty f=1kHz)	Ifp	125			mA

PACKAGING DIMENSIONS



RECOMMEND PAD LAYOUT



Unit:mm

Fig 1. Forward Current vs. Forward Voltage

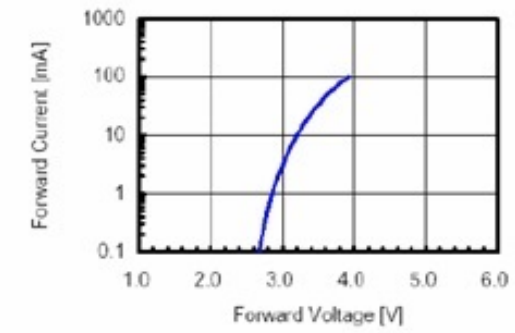


Fig 2. Relative Intensity vs. Forward Current

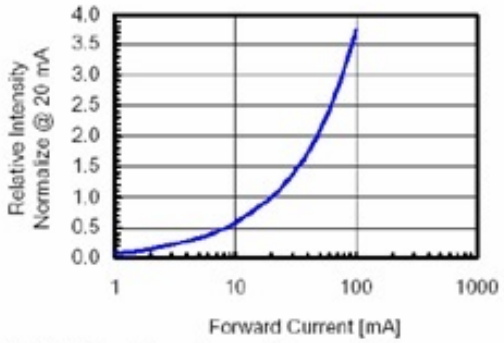


Fig 3. Forward Voltage vs. Temperature

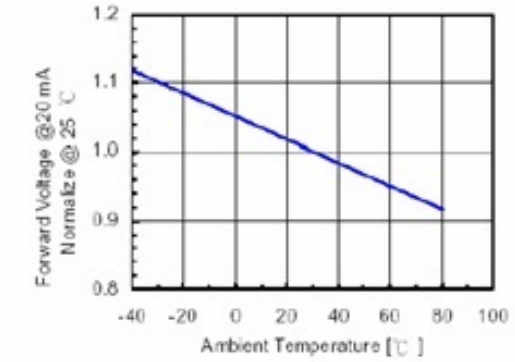


Fig 4. Relative Intensity vs. Temperature

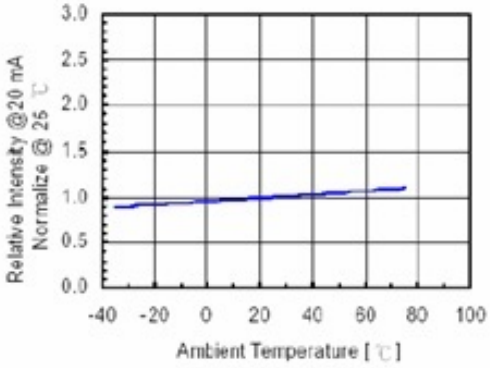
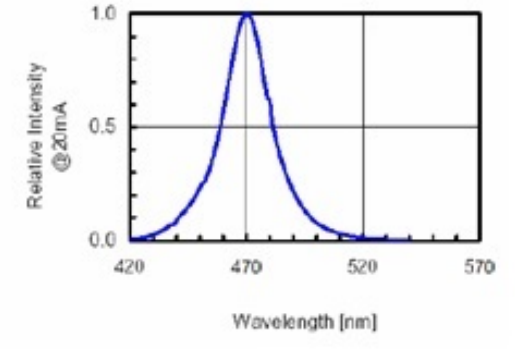


Fig 5.Relative Intensity vs. Wavelength



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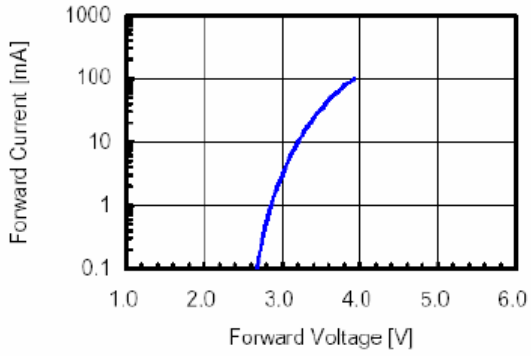

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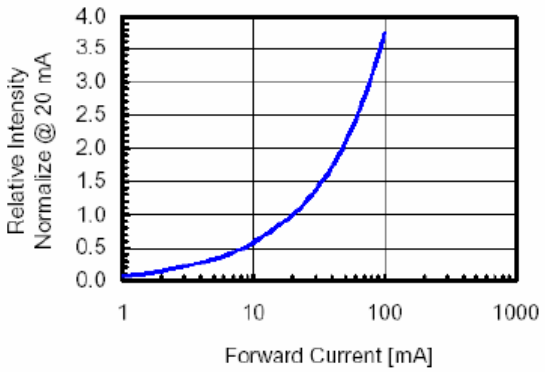

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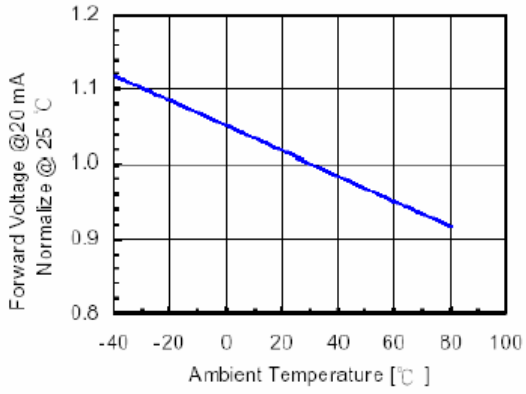

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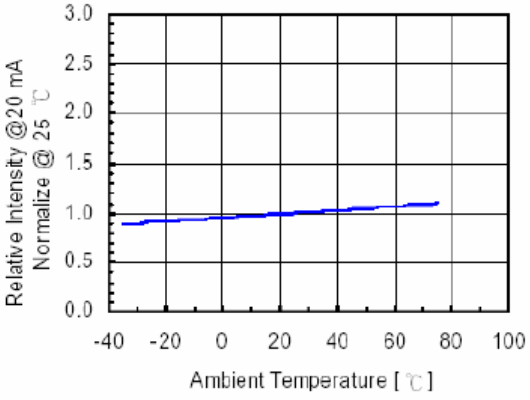

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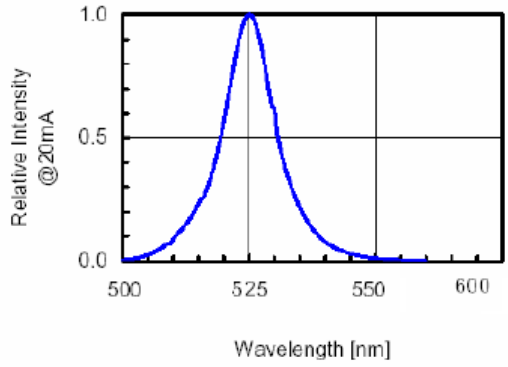

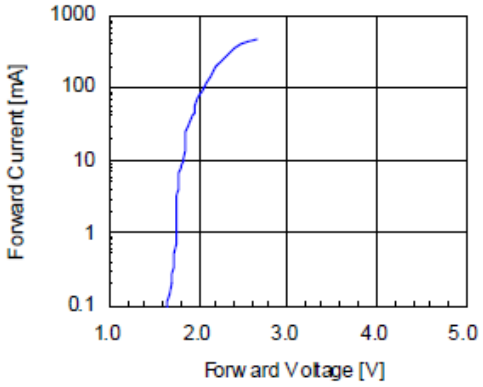

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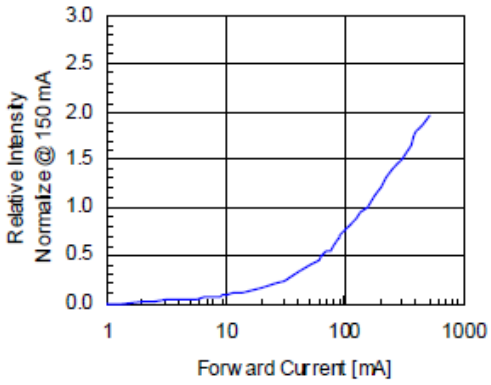

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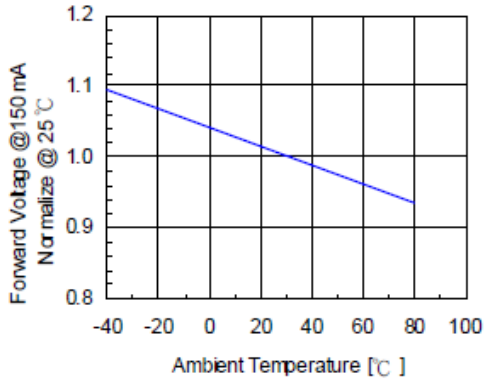

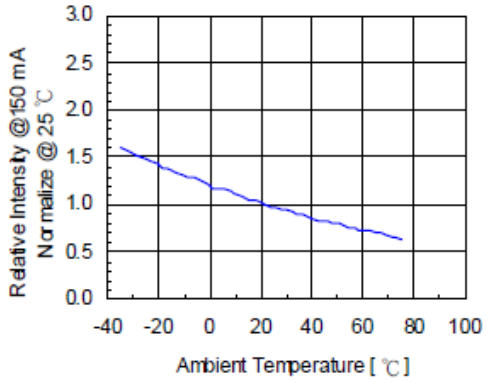

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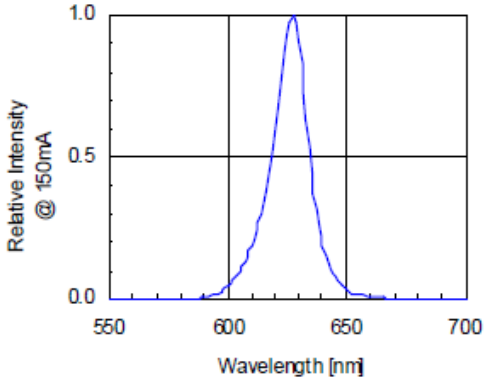
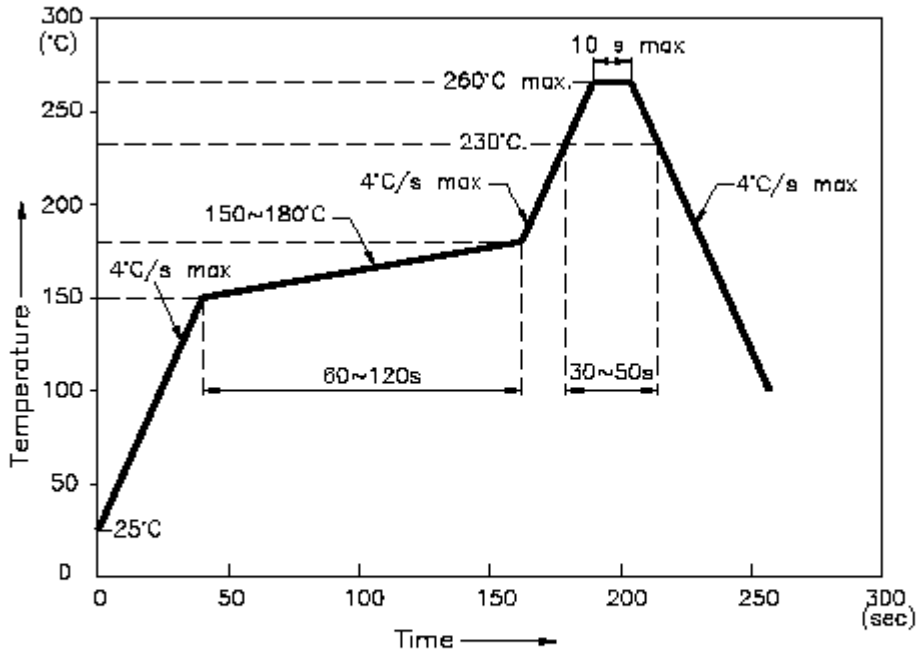


Soldering Profile

Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
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.

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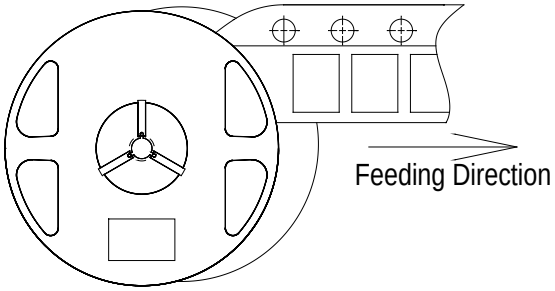
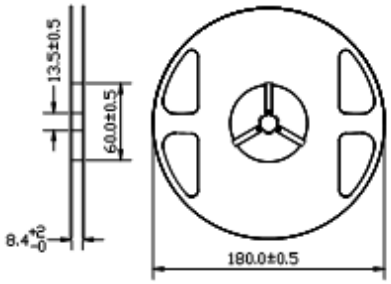
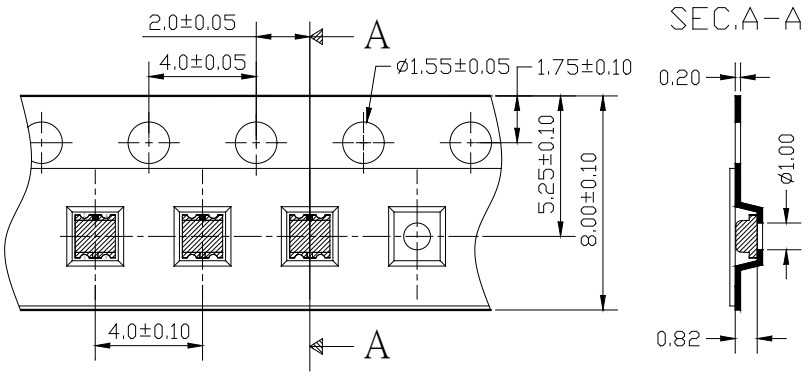
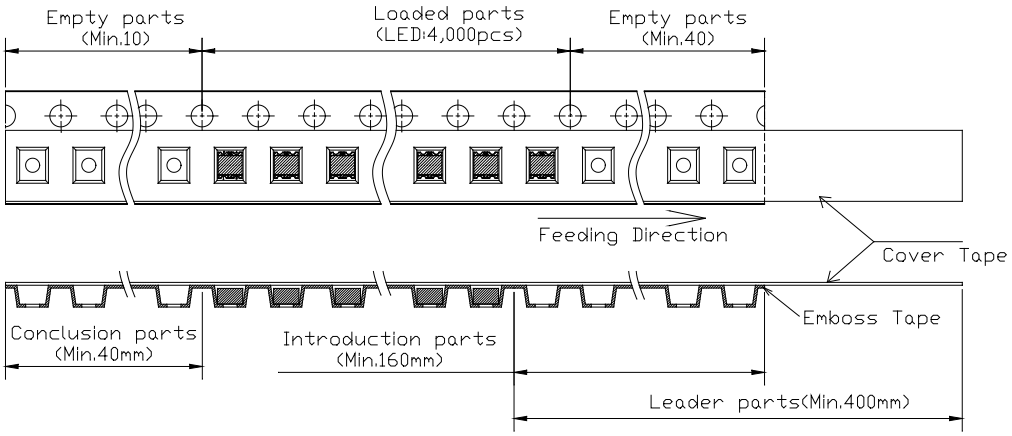
PACKAGING SPECIFICATIONS

Feeding Direction	**Dimensions of Reel (Unit: mm)**
	

Dimensions of Tape (Unit: mm)



Arrangement of Tape



NOTES

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The polarity mark is oriented towards the tape sprocket hole ;
4. 4,000pcs/Reel.

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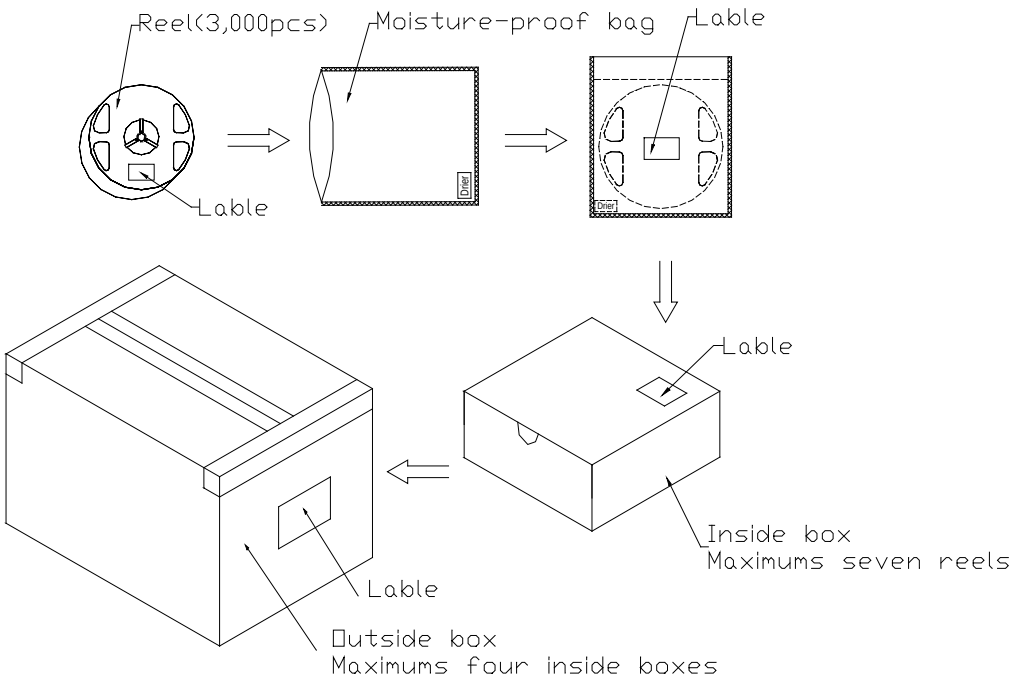
Packaging specifications



NOTES:

Reeled products (numbers of products are 4,000pcs) packed in a seal off moisture-proof bag along with a desiccant one by one, Seven moisture-proof bag of maximums (total maximum number of products are 28,000pcs) packed in an inside box (size: about 283mm x about 194mm x about 102mm) and four inside boxes of maximums are put in the outside box (size: about 410mm x about 254mm x about 229mm) Together with buffer material, and it is packed. (Part No., Lot No., quantity should appear on the label on the moisture-proof bag, part No. And quantity should appear on the label on the cardboard box.) The number of the loading steps of outside box (cardboard box) has it to three steps.