



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : S196ANW4-BH

0603Package 1.6*0.8*0.6mm Chip LEDs

Features :

- Lens Molding
- 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	White	Yellow

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
CIE Coordinates	If=5Ma	X		0.3089		
		Y		0.30633		
Forward voltage	If=5mA	VF	2.8		3.4	V
Luminous intensity	If=5mA	Iv	200		300	mcd
Viewing angle at 50% Iv	If=5mA	2θ 1/2		120		Deg
Reverse current	VR=5V	IR			10	μA

Absolute Maximum Ratings(Ta=25°C)

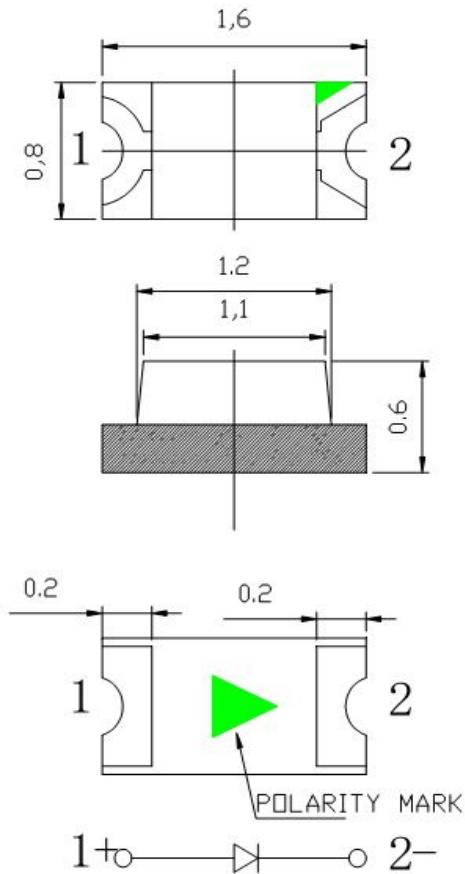
Parameter	Symbol	Value	Unit
Power dissipation	Pd	72	mW
Forward current	IF	20	mA
Reverse voltage	VR	5	V
Operating temperature range	Top	-40 ~+80	°C
Storage temperature range	Tstg	-40 ~+85	°C
Peak pulsing current (1/8 duty f=1kHz)	I _{fp}	100	mA

21JUN2023H

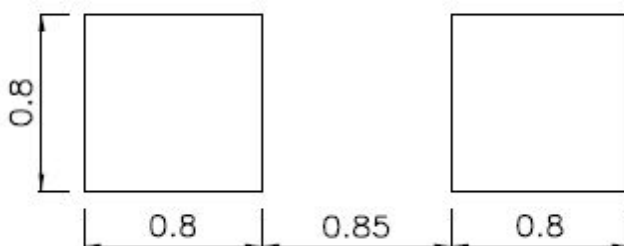


YETDA INDUSTRY LTD.

PACKAGING DIMENSIONS



RECOMMEND PAD LAYOUT



NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are $\pm 0.15\text{mm}$ (0.004inch) unless otherwise noted.



Typical optical characteristics curves 典型光学特性曲线

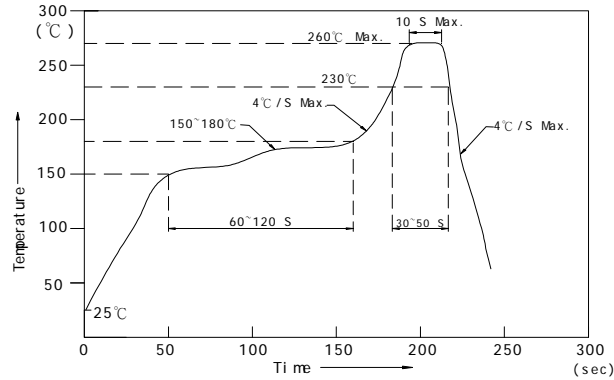
Ambient Temperature vs. Forward Current		Forward Current VS. Relative Intensity	
Forward Current(mA)		Relative luminous Intensity	
	Soldering Temperature °C		Forward Current(mA)
Forward Voltage VS. Forward Current		Ambient Temperature VS. Relative Intensity	
Forward Current(mA)		Relative luminous Intensity	
	Forward Voltage(V)		Ambient Temperature ta °C
Relative spectral emission		Radiation diagram	
Relative luminous intensity			
	Wavelength(nm)	SPATIA DISTRIBUTION	



YETDA INDUSTRY LTD.

Reflow Profile

■ Reflow Temp/Time



Notes:

1. We recommend the reflow temperature $245^{\circ}\text{C} (\pm 5^{\circ}\text{C})$. 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.

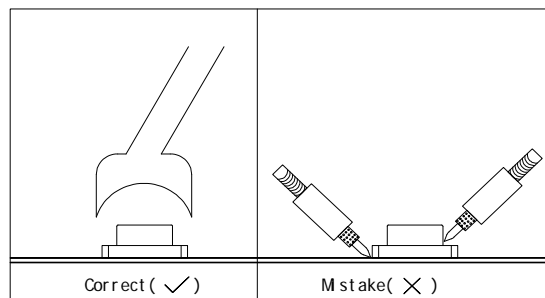
■ Soldering iron

Basic spec is $\leq 5\text{sec}$ when $320^{\circ}\text{C} (\pm 20^{\circ}\text{C})$. If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under 350°C .

■ Rework

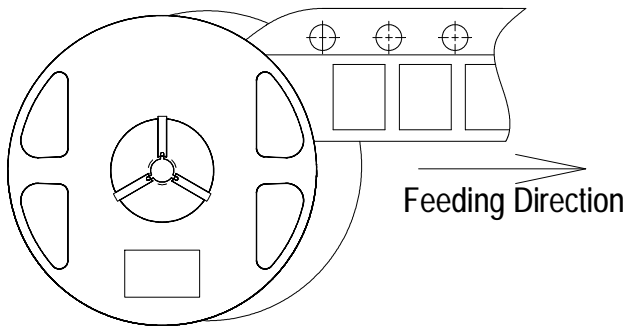
1. Customer must finish rework within 5 sec under 340°C .
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.

■ Feeding Direction

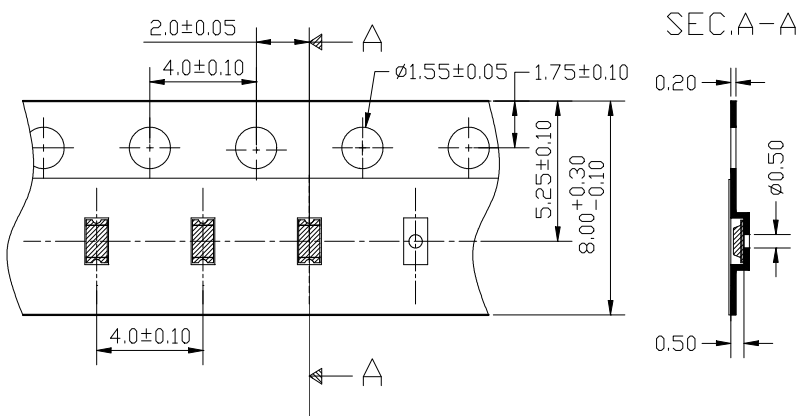




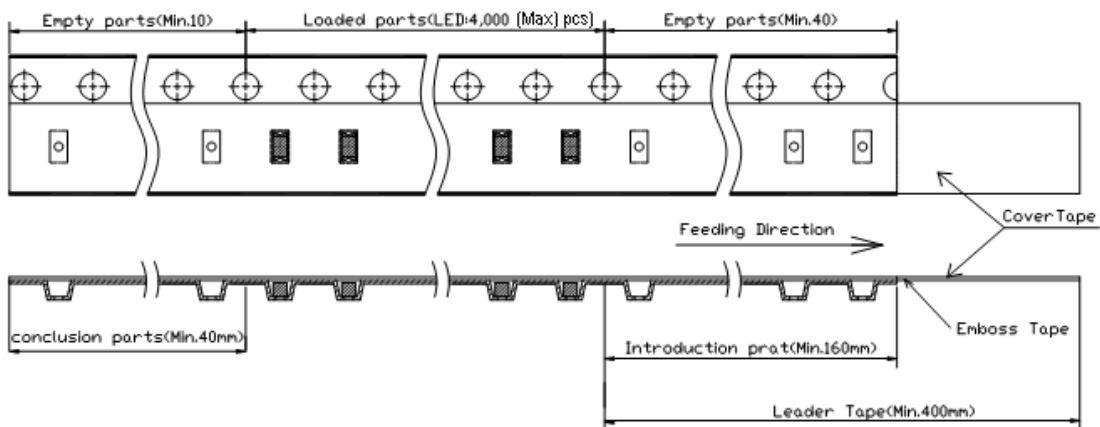
YETDA INDUSTRY LTD.



■ 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 cathode is oriented towards the tape sprocket hole.
4. 4,000(Max)pcs/Reel