



# YETDA INDUSTRY LTD.

## 5mm Super Bright Pure Green LED Lamps S500TG1D

5 mm with InGaN Dice ◦

Encapsulated with Green Diffused Package ◦

Long Leads ◦

### Absolute Maximum Ratings : ( Ta=25°C )

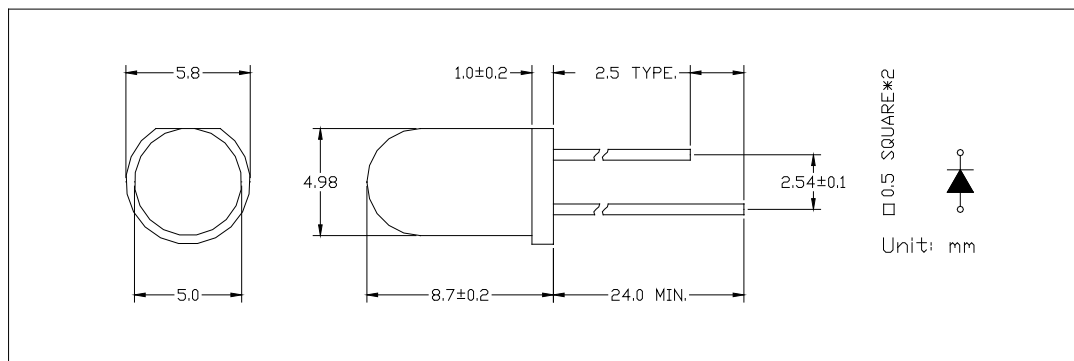
Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	30	mA
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-50°C to +100°C	
Lead Soldering Temperature	260°C for 3 seconds 1.6mm(0.063 inch) from body	

### Electro-Optical Characteristics ( Ta = 25°C )

Parameter Radiant	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I <sub>F</sub> = 20mA	V <sub>F</sub>	2.8	3.0	3.4	V
Reverse Current	V <sub>R</sub> = 5V	I <sub>R</sub>			10	uA
Luminous Intensity	I <sub>F</sub> = 20mA	I <sub>v</sub>	1500		2100	mcd
Spectral Bandwidth	I <sub>F</sub> = 20mA	Δλ	30	32	35	nm
Wavelength	I <sub>F</sub> = 20mA	λ <sub>p</sub>		530		nm
		λ <sub>d</sub>	520	525	530	nm
Viewing Angle	I <sub>F</sub> = 20mA	2 θ <sub>1/2</sub>		80		deg

### Package

Item: 500





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## Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

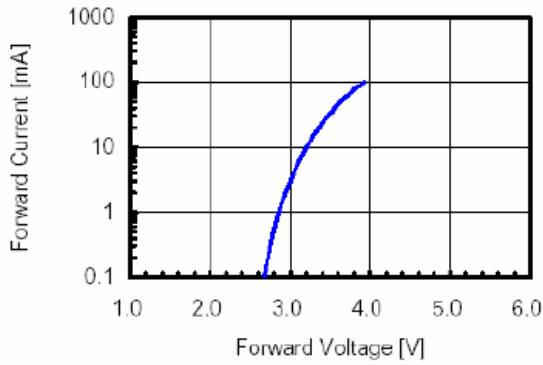


Fig 2. Relative Intensity vs. Forward Current

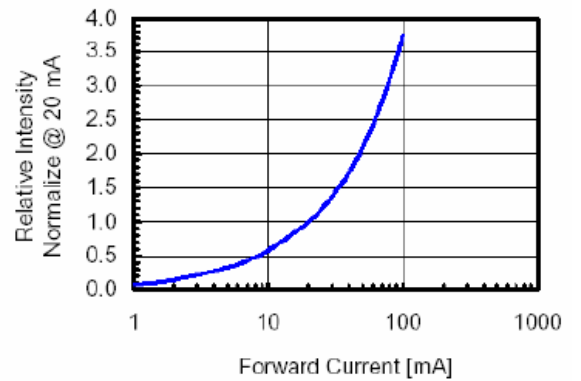


Fig 3. Forward Voltage vs. Temperature

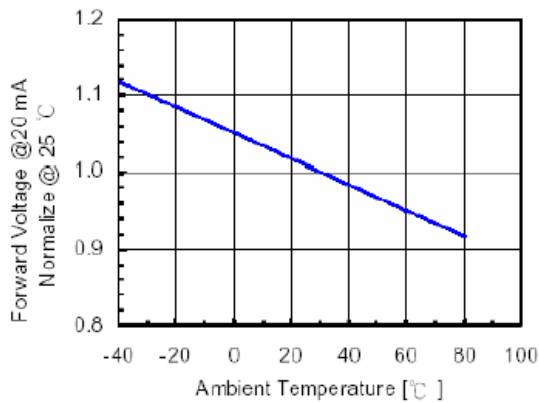


Fig 4. Relative Intensity vs. Temperature

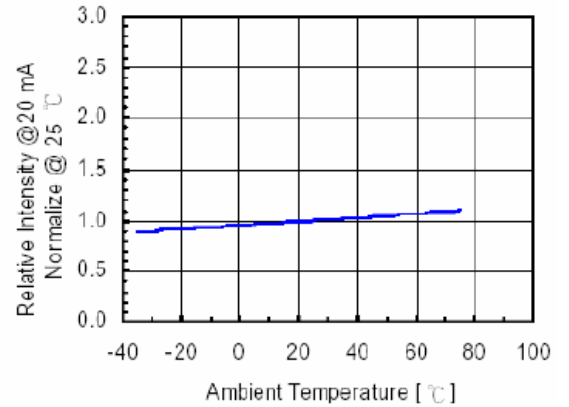
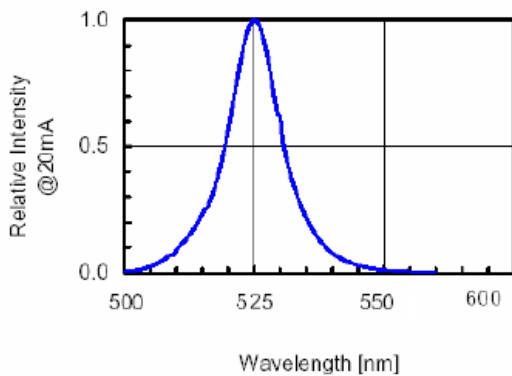


Fig 5. Relative Intensity vs. Wavelength





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## •Soldering:

### 1. Manual of soldering

The temperature of the iron tip should not be higher than 260 °C and

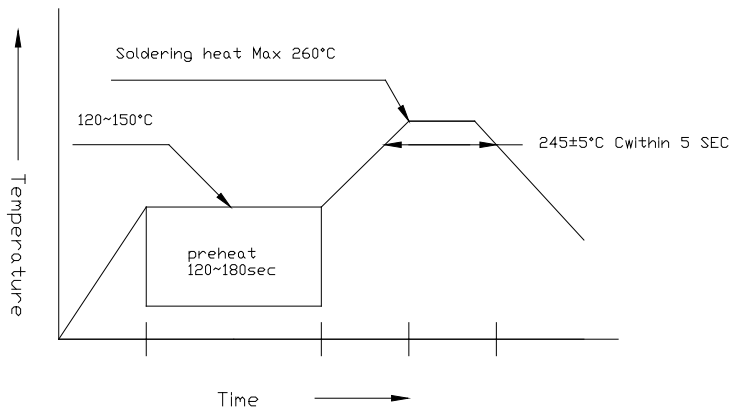
Soldering within 3 seconds per solder-land is to be observed

### 2. DIP soldering (Wave Soldering):

Preheating: 120

°C ~ 150°C within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching)



### 3. Reflow Soldering

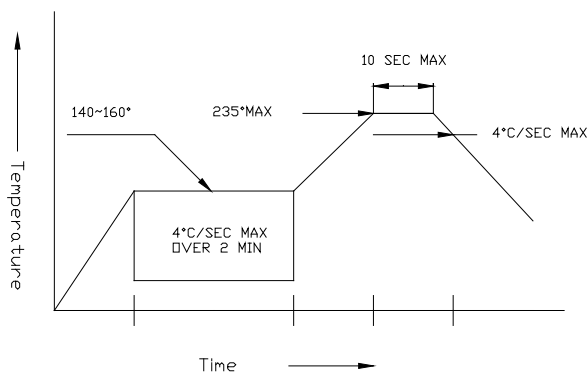
Preheating: 140

°C ~ 160°C ±5°C, within 2 minutes.

Operation heating: 235

°C (Max) within 10 seconds (Max)

Gradual Cooling (Avoid quenching)



## •Handling:

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook