

# YETDA INDUSTRY LTD.

# 3mm Super Bright Pure Green LED Lamps S300TG1G

3 mm with InGaN Dice  $\circ$  Encapsulated with Green Diffused Package  $\circ$  Long Leads  $\circ$ 

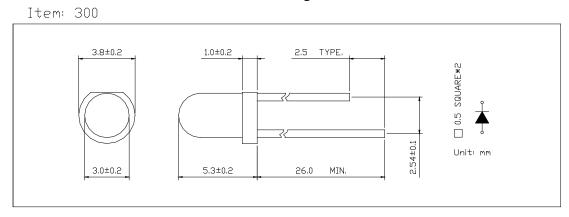
## Absolute Maximum Ratings : ( Ta=25℃ )

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

## Electro-Optical Characteristics ( $Ta = 25^{\circ}C$ )

Parameter Radiant	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	$I_F = 20 \text{mA}$	VF	2.8	3.0	3.4	V
Reverse Current	$V_R = 5V$	IR			10	uA
Luminous Intensity	$I_F = 20 \text{mA}$	Iv	1200		1800	mcd
Spectral Bandwidth	$I_F = 20 \text{mA}$	Δλ	30	32	35	nm
Wavelength	$I_F = 20 \text{mA}$	λр		530		nm
		λd	520	525	530	nm
Viewing Angle	$I_F = 20 \text{mA}$	2 <b>θ</b> 1/2		80		deg

## Package



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## **Typical Electro-Optical Characteristics Curve:**

Fig 1. Forward Current vs. Forward Voltage

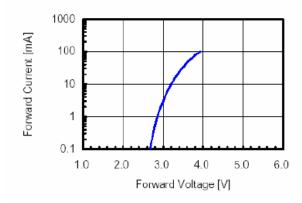


Fig 3. Forward Voltage vs. Temperature

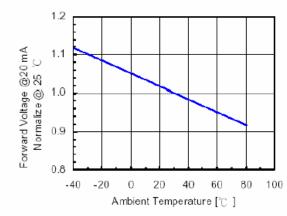


Fig 5.Relative Intensity vs. Wavelength

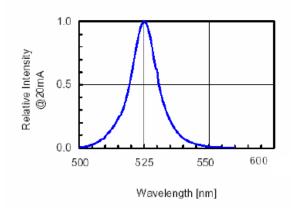


Fig 2. Relative Intensity vs. Forward Current

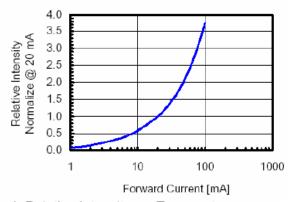
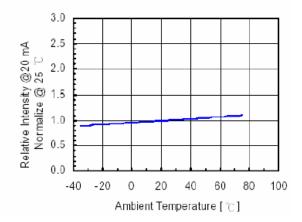


Fig 4. Relative Intensity vs. Temperature





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### •Soldering:

1. Manual of soldering

The temperature of the iron tip should not be higher than 260 Cand

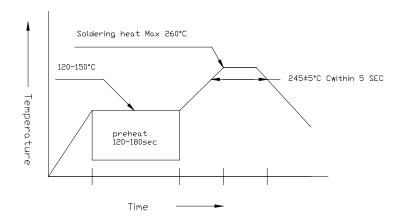
Soldering within 3 seconds per solder-land is to be observed

2. DIP soldering (Wave Soldering):

Preheating:120

°C~150°C within 5 sec.260°C(Max)

Gradual Cooling (Avoid quenching)



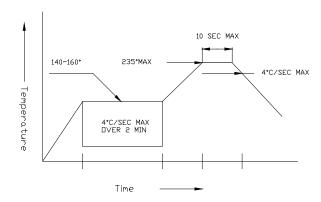
### 3. Reflow Soldering

Preheating:140

Operation heating:235

Gradual Cooling (Avoid quenching)

°C~160°C ±5°C, within 2 minutes. °C(Max)within 10 seconds(Max)



### •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