

YETDA INDUSTRY LTD.

S300TB1G 3mm Super Bright Blue LED Lamps

3mm with InGaN Dice •

Encapsulated with Blue Diffused Color Package $\,^{\circ}$

Long Leads •

Absolute Maximum Ratings : (Ta=25℃)

Parameter	Maximum Rating	Unit			
Peak Forward Current	120	mA			
Continuous Forward Current	30	mA			
Operating Temperature Range	-40° C to $+85^{\circ}$ C				
Storage Temperature Range	-50° 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		3.2	3.8	V
Reverse Current	$V_R = 5V$	IR			10	uA
Luminous Intensity	$I_F = 20 \text{mA}$	Iv	400	700		mcd
Spectral Bandwidth	$I_F = 20 \text{mA}$	Δλ		30		nm
Wavelength	$I_F = 20 \text{mA}$	λ p				nm
		λd		465	470	nm
Viewing Angle	$I_F = 20 \text{mA}$	2 0 1/2		80		deg

Package

Item: 300

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Fig 1. Forward Current vs. Forward Voltage

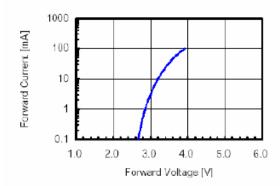


Fig 3. Forward Voltage vs. Temperature

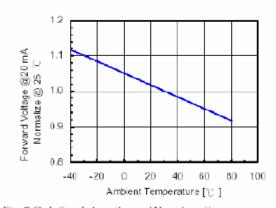


Fig 5.Relative Intensity vs. Wavelength

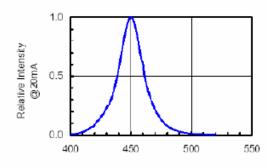


Fig 2. Relative Intensity vs. Forward Current

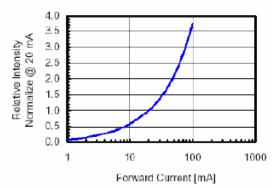
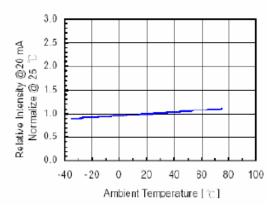


Fig 4. Relative Intensity vs. Temperature



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•Soldering:

1. Manual of soldering

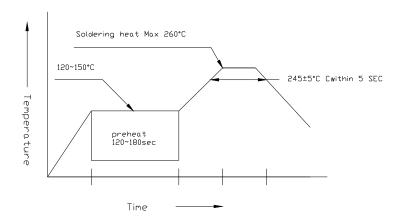
The temperature of the iron tip should not be higher than 260°C and

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

2. DIP soldering (Wave Soldering):

Preheating: $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$ within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching)

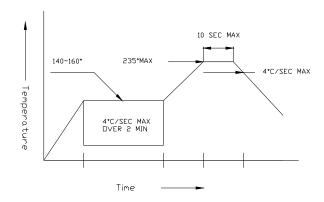


3. Reflow Soldering

Preheating: $140^{\circ}\text{C} \sim 160^{\circ}\text{C} \pm 5^{\circ}\text{C}$, 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