

# 5mm Warm White Super Bright LED, wide angle S500TWW4GF-S

5 mm with Super Bright InGaN Dice  $\,\circ\,$  Encapsulated with water clear lens Package  $\,\circ\,$  Long Leads  $\,\circ\,$ 

Absolute Maximum Ratings . (1a=23 ( )								
Parameter	Symbol	Maximum Rating	Unit					
Power Dissipation	Pd	100	mw					
Reverse Voltage	VR	5	V					
Average Forward Current	Laf	30	mA					
Peak Forward Current (Duty=0.1,10KHZ)	IPF	200	mA					
Opertating Temperature Range	Topr	$-20^{\circ}$ C to $+80^{\circ}$ C						
Storage Temperature Range	Tstg	-40°C to +100	°C					
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds								

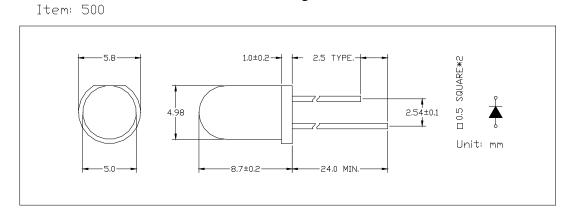
# Absolute Maximum Ratings : ( Ta=25°C )

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

-	,	-				
Parameter	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	If = 20mA	Vf		3.2	3.8	V
Reverse Current	Vr = 5V	Ir			10	uA
Luminous Intensity	If = 20mA	Iv		6000		mcd
Spectral Bandwidth	If = 20mA	Δλ				nm
Wavelength	If = 20mA	X		0.40		
		Y		0.40		
View Angle	If = 20mA	2 <b>θ</b> 1/2		60		deg

Please refer to CIE1931 Chromaticity Coordinate diagram

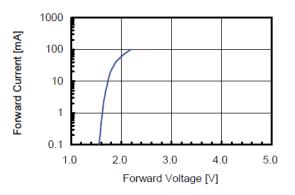
Package





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#### Fig 1. Forward Current vs. Forward Voltage





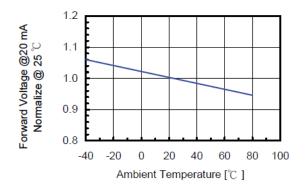


Fig 2. Relative Intensity vs. Forward Current

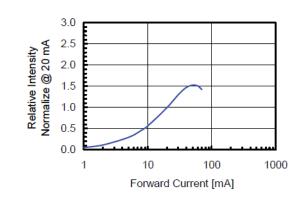
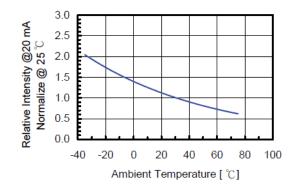


Fig 4. Relative Intensity vs. Temperature



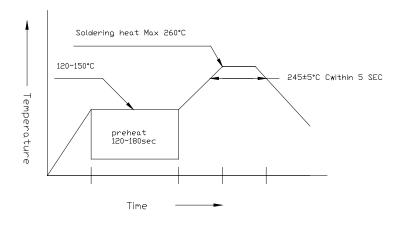


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## •Soldering:

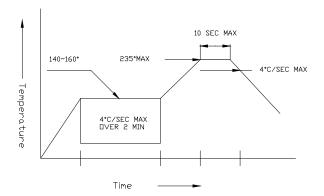
1. Manual of soldering

The temperature of the iron tip should not be higher than  $260^{\circ}$ C and Soldering within 3 seconds per solder-land is to be observed 2. DIP soldering (Wave Soldering): Preheating: $120^{\circ}$ C ~150^{\circ}C within 5 sec. $260^{\circ}$ C (Max) Gradual Cooling (Avoid quenching)



# 3. Reflow Soldering

Preheating:  $140^{\circ}$ C ~ $160^{\circ}$ C ±5°C , within 2 minutes. Operation heating:  $235^{\circ}$ 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