



# YETDA INDUSTRY LTD.

## 5mm Super Bright Red Color LED Lamps Q500NDH4D

5mm with AlGaInP Dice ◦

Encapsulated with Water Clear Package with 2 leads ◦

Long Leads ◦

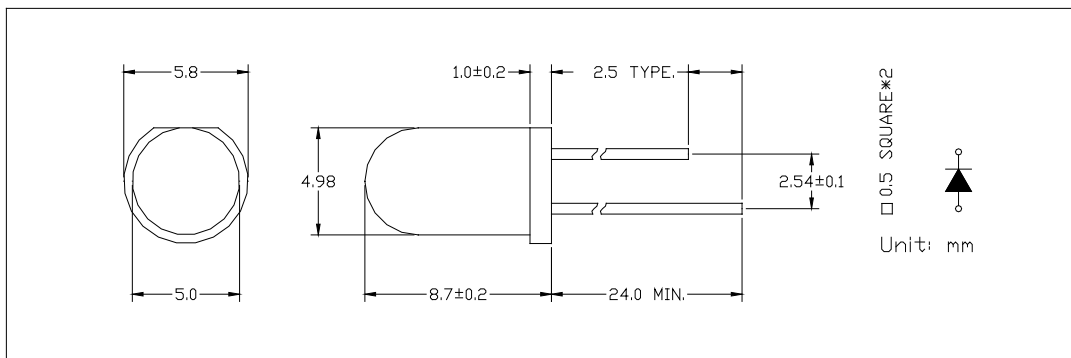
### Absolute Maximum Ratings : ( Ta=25°C )

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
Operatating Temperature Range	TOPR	-20°C to +80 °C	
Storage Temperature Range	TSTG	-40°C to +100 °C	
Lead Soldering Temperature { 1.6mm(0.063inch) From Body } 260°C For 3 Seconds			

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

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I <sub>F</sub> = 20mA	V <sub>F</sub>		2.0	2.4	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>	3000	4500		mcd
Wavelength	I <sub>F</sub> = 20mA	λ		625		nm
Viewing Angle	I <sub>F</sub> = 20mA	2θ 1/2		30		deg

Item: 500



14AUG23W



## Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

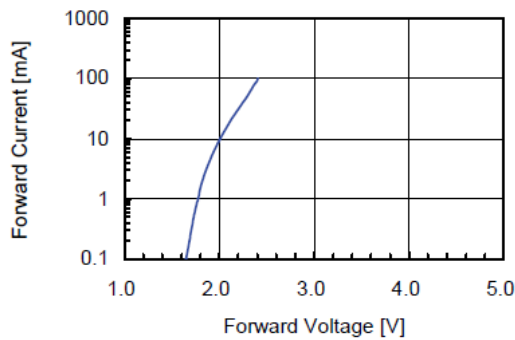


Fig 2. Relative Intensity vs. Forward Current

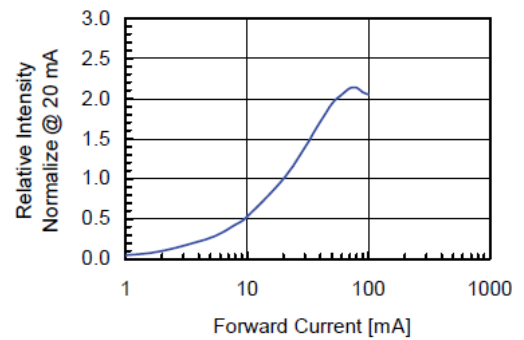


Fig 3. Forward Voltage vs. Temperature

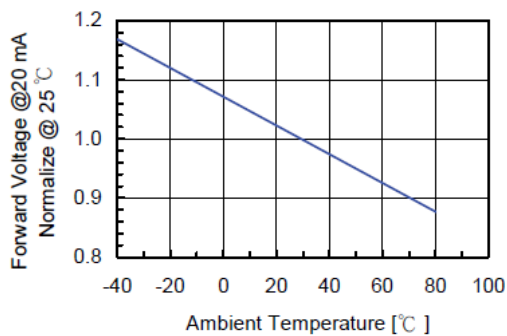


Fig 4. Relative Intensity vs. Temperature

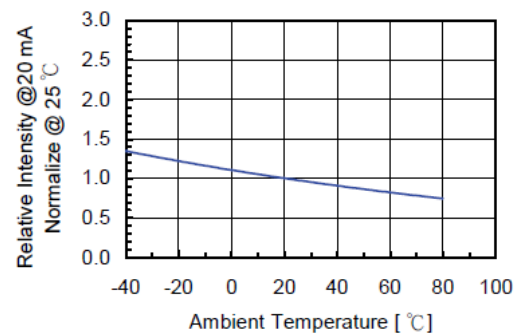
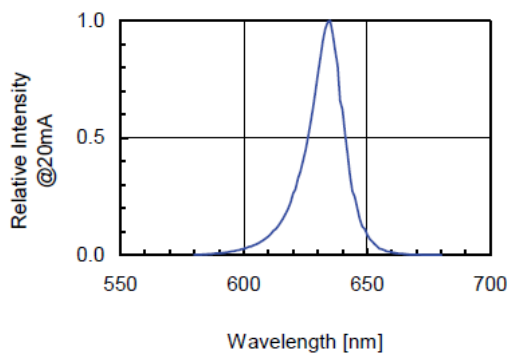


Fig 5. Relative Intensity vs. Wavelength





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## **Soldering:**

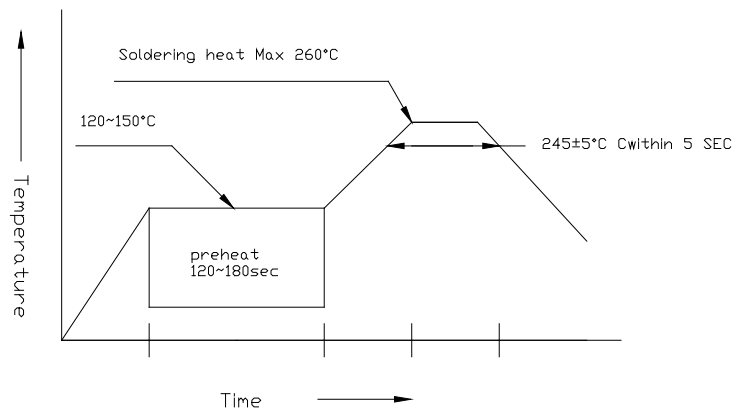
### 1. Manual of soldering

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)



## **•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