



YETDA INDUSTRY LTD.

## 5mm Super Bright Red LED Lamps Q500HCH4D

5 mm with AlGaInP dice ◦

Encapsulated with Water clear package ◦

Long Leads ◦

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

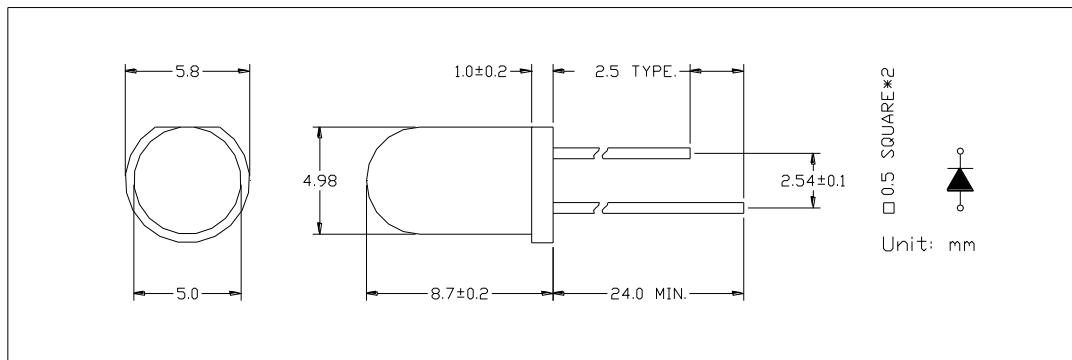
Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	30	mA
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-50°C to +100°C	
Lead Soldering Temperature	260°C for 3 seconds 1.6mm(0.063 inch) from body	

### 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>		2.00	2.40	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>	2500	3000		mcd
Spectral Bandwidth	I <sub>F</sub> = 20mA	Δλ		20		nm
Wavelength	I <sub>F</sub> = 20mA	λ <sub>p</sub>				nm
		λ <sub>d</sub>		625		nm
Viewing Angle	I <sub>F</sub> = 20mA	2 θ <sub>1/2</sub>		30		deg

### Package

Item: 500





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## ■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

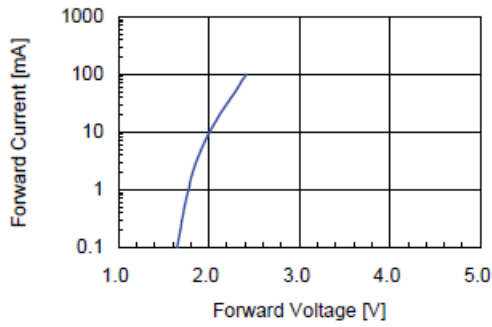


Fig 2. Relative Intensity vs. Forward Current

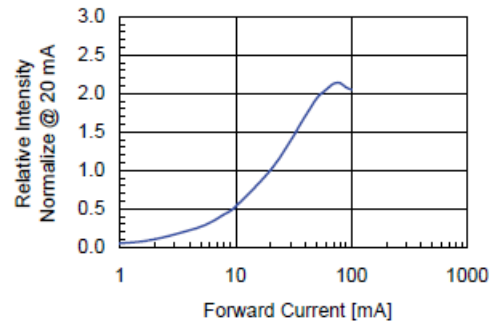


Fig 3. Forward Voltage vs. Temperature

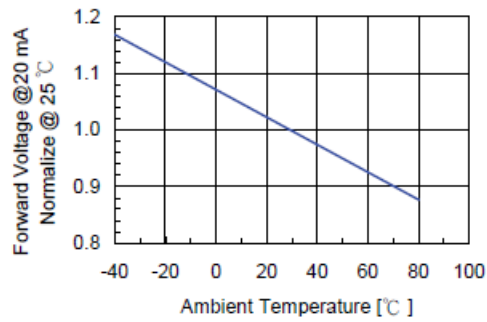


Fig 4. Relative Intensity vs. Temperature

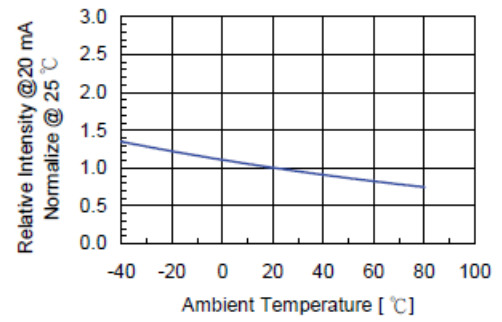
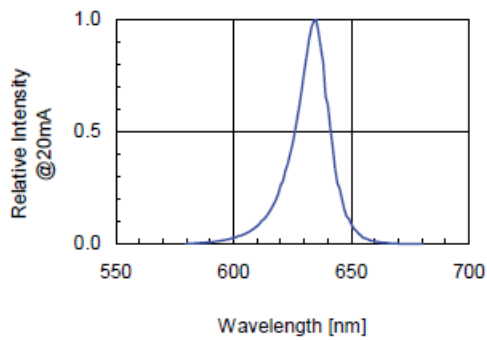


Fig 5. Relative Intensity vs. Wavelength





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## •Soldering:

### 1. Manual of soldering

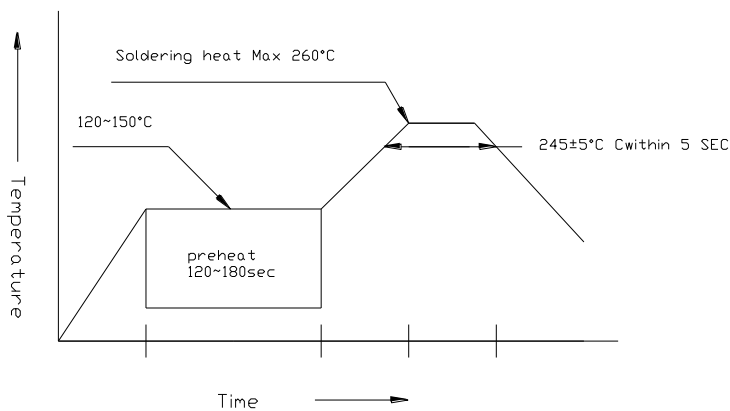
The temperature of the iron tip should not be higher than 260°C and

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)

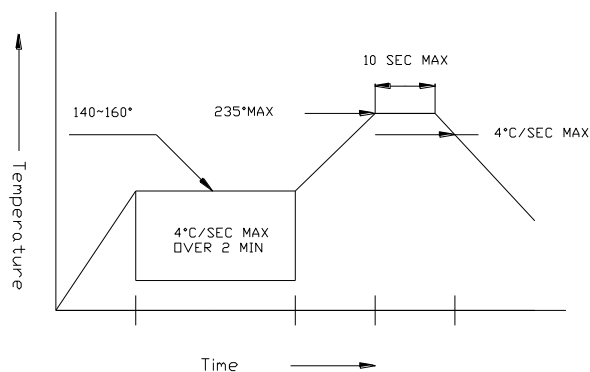


### 3. Reflow Soldering

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