



YETDA INDUSTRY LTD.

5mm Infrared LED Lamps I500C4D

- 5 mm with Infrared dice ◦
- Encapsulated with water clear package ◦
- * Long leads ◦

Absolute Maximum Ratings :

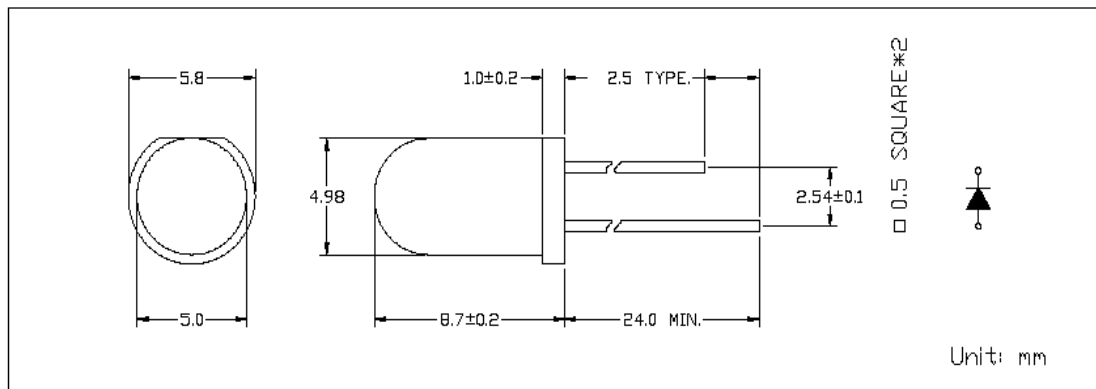
Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	40	mA
Operating Temperature Range	-20°C to + 75°C	
Storage Temperature Range	-40°C + 100°C	
Lead Soldering Temperature	260°C for 3 seconds 1.6mm(0.063 inch) from body	

Electro-Optical Characteristics (Ta = 25°C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I _F = 20mA	V _F		1.30	1.50	V
Forward Voltage	I _F = 100mA			1.60	1.65	
Reverse Current	V _R = 5V	I _R			10	uA
Radiant Intensity	I _F = 20mA	E _e		8		mW/sr
	I _F = 100mA, tp=100us, tp/t=0.01			30		
Continuous Forward Current	I _{FC}			40		mA
Viewing Angle	2 θ 1/2			45		deg
Peak Emission Wavelength	I _F = 100mA	λ _p		940		nm
Power Dissipation	I _F = 100mA	P _D		150		mW

Package

Item: 500



13APR5F



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Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. DC Forward Voltage

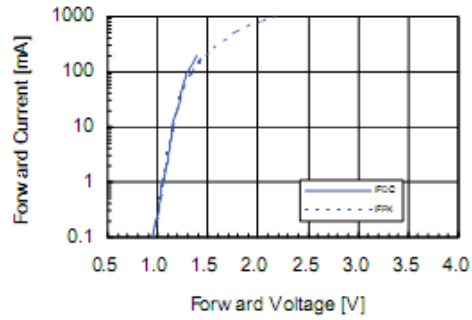


Fig 2. Relative Radiant Power vs. Wavelength

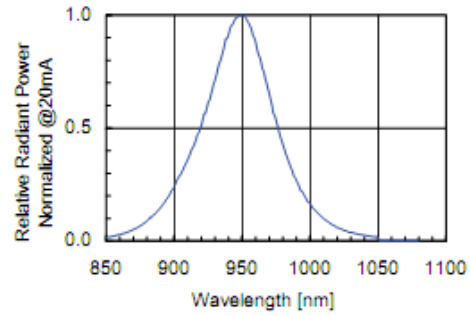


Fig 3. Relative Radiant Power vs. Forward DC Current

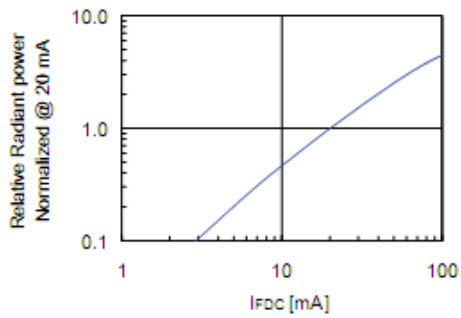


Fig 4. Relative Radiant Power vs. Forward Peak Current

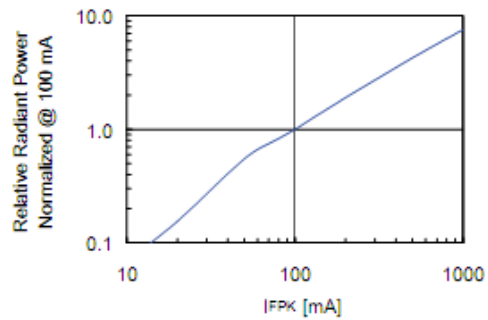


Fig 5. Forward DC Voltage vs. Temperature

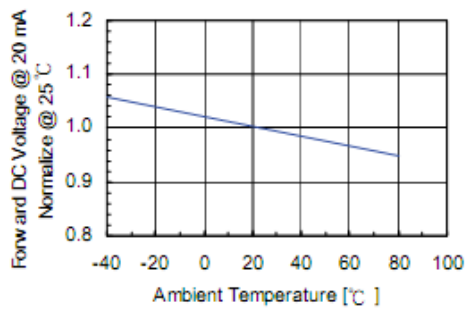
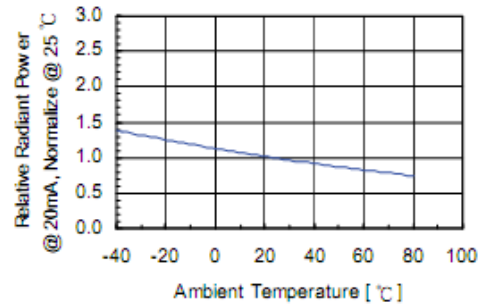


Fig 6. Relative Radiant Power vs. Temperature





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•Soldering:

1. Manual of soldering

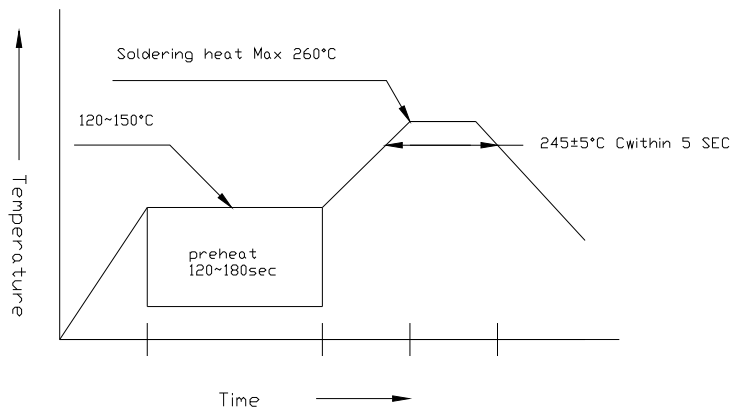
The temperature of the iron tip should not be higher than 260°C and

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

2. DIP soldering (Wave Soldering):

Preheating: 120°C ~ 150°C within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching)

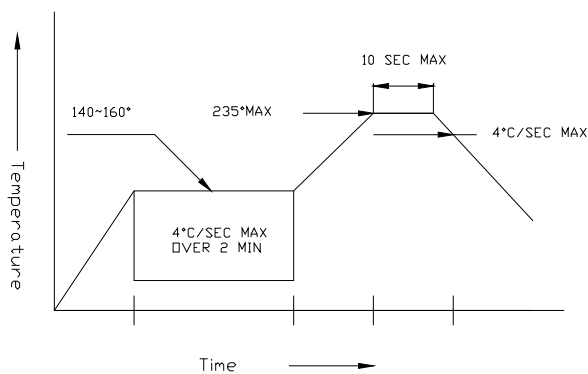


3. Reflow Soldering

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