



# YETDA INDUSTRY LTD.

## 5mm Infrared LED Lamps I500C5D

- 5 mm with Infrared dice.
- Encapsulated with Blue Transparent package.
- \* Long leads.

### Absolute Maximum Ratings :

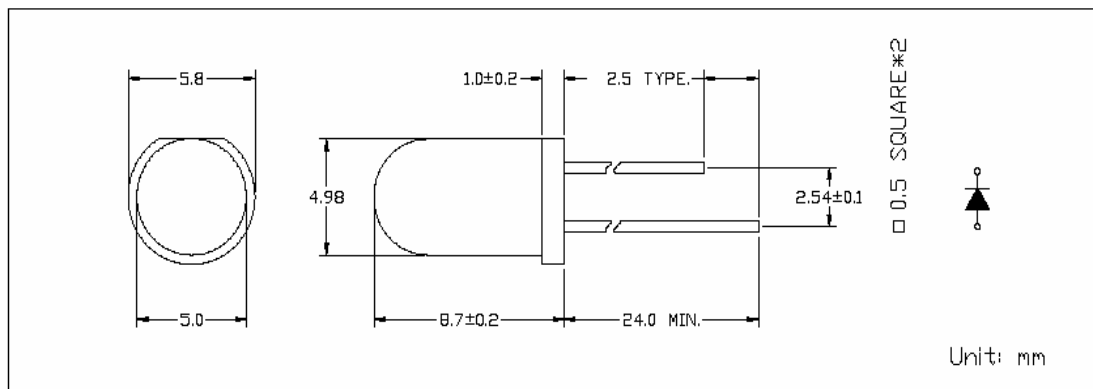
Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	30	mA
Operating Temperature Range	-20 to + 75	
Storage Temperature Range	-40 + 100	
Lead Soldering Temperature	260 for 3 seconds 1.6mm(0.063 inch) from body	

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

Parameter Radiant	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	If = 20mA	Vf		1.3	1.4	V
Forward Voltage	IF=100mA				1.65	
Reverse Current	Vr = 5V	Ir			10	uA
Radiant Intensity	If=20mA	Ee		8		mW/sr
	If=100mA, tp=100us, tp/t=0.01			26		
Continuous Forward Current	If(Rec)			40		mA
Half Power Beam Angle	2 1/2			20		deg
Peak Emission Wavelength	If = 100mA	p		940		nm
Power dissipation	If = 100mA	Pd		150		mW

### Package

Item: 500



# Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

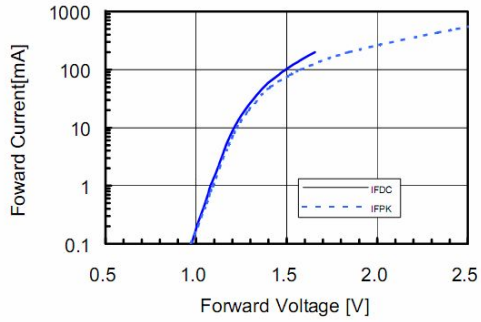


Fig 2. Relative Radiant Power vs. Wavelength

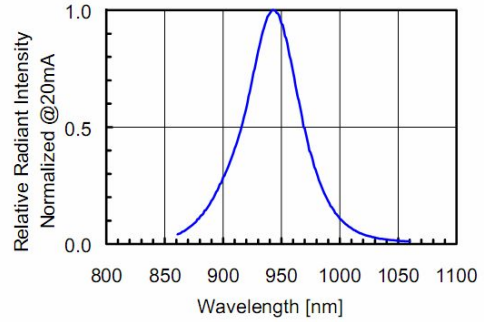


Fig 3. Relative Radiant Power vs. Forward DC Current

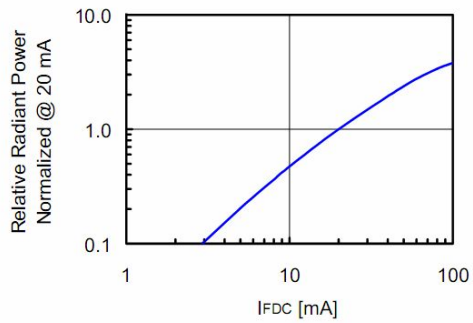


Fig 4. Relative Radiant Power vs. Forward Peak Current

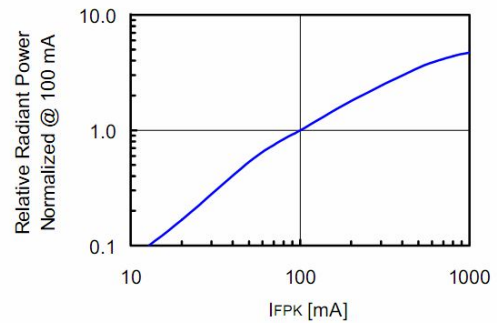


Fig 5. Forward DC Voltage vs. Temperature

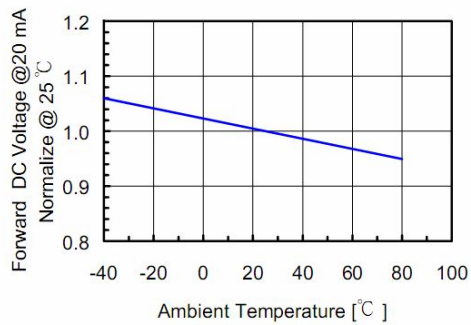
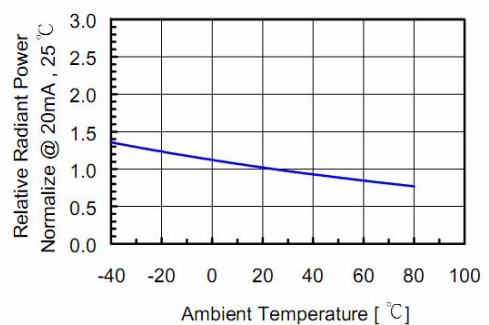


Fig 6. Relative Radiant Power vs. Temperature



• **Soldering:**

1. Manual of soldering

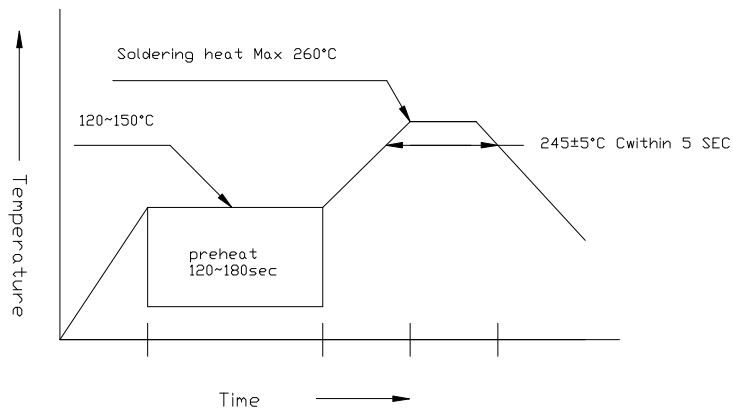
The temperature of the iron tip should not be higher than 260°C and

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)

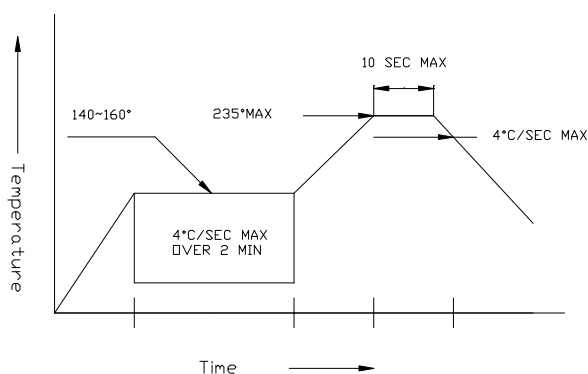


3. Reflow Soldering

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