YETDA INDUSTRY LTD.

10mm Infrared LED LAMP

I810TOA4D

10mm With Infrared Chips.

Encapsulated with Water clear Package.

Long Leads.

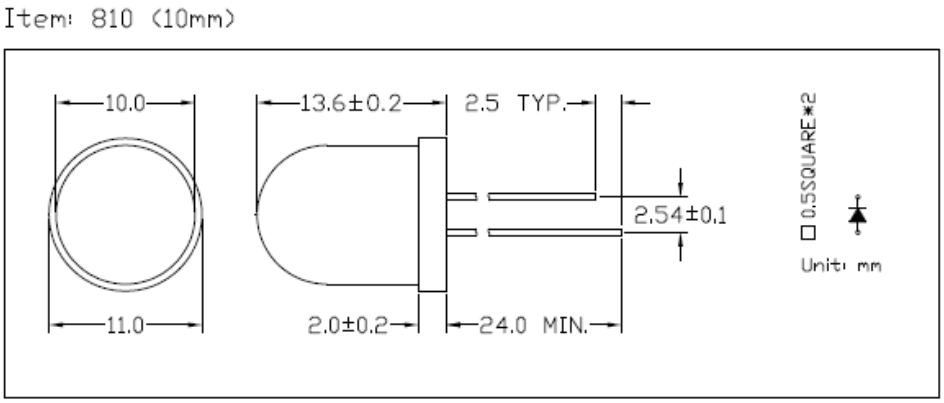
Absolute Maximum Ratings :

Parameter	Maximum Rating	Unit
Peak Forward Current	200	mA
Continuous Forward Current	100	mA
Operating Temperature Range	－20℃ to ＋75℃	
Storage Temperature Range	－40℃ to ＋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 = 50mA	Vf		1.43	1.80	V
	If=200mA			1.62	2.30	V
Reverse Current	V_R=5V	Ir			10	uA
Radiant Intensity	If = 20mA	Ee		46		mW/sr
Peak Wavelength	If = 20mA	λp		850		nm
Power dissipation		Pd		300		mW
Viewing Angle	If = 20mA	2θ1/2		60		deg

Package



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■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

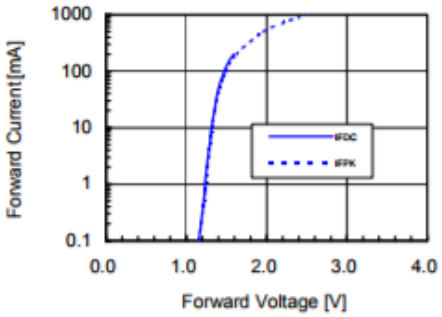


Fig 2. Relative Radiant Power vs. Wavelength

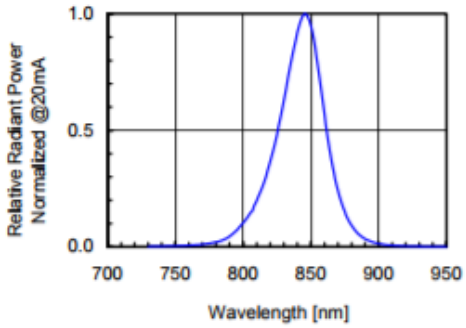


Fig 3. Relative Radiant Power vs. Forward DC Current

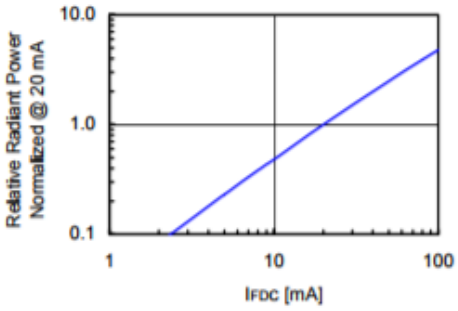


Fig 4. Relative Radiant Power vs. Forward Peak Current

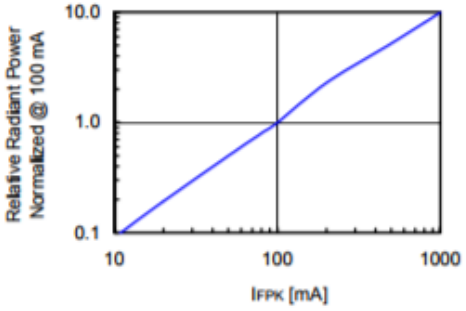


Fig 5. Forward DC Voltage vs. Temperature

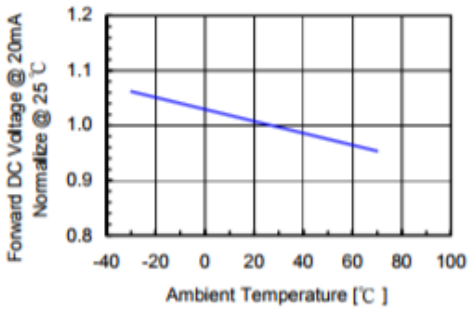
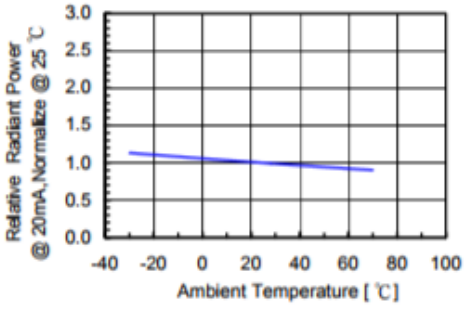


Fig 6. Relative Radiant Power vs. Temperature



•Soldering:

1. Manual of soldering

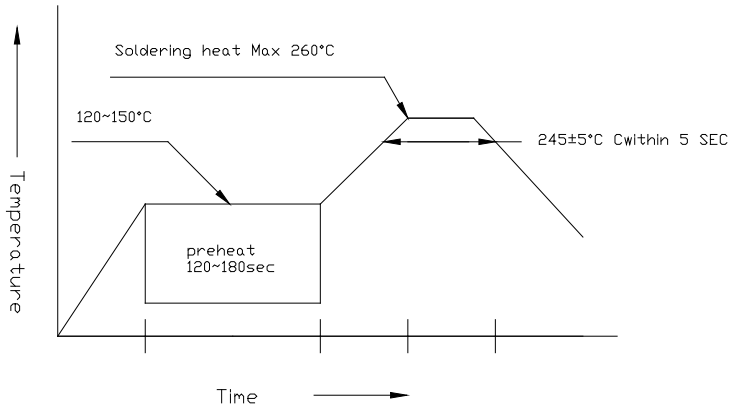
The temperature of the iron tip should not be higher than 260 ℃and

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

2. DIP soldering (Wave Soldering):

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

Gradual Cooling (Avoid quenching)

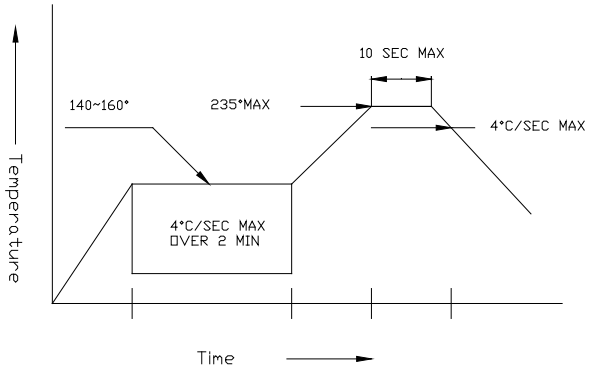


3. Reflow Soldering

Preheating:140 ℃~160℃±5℃,within 2 minutes.

Operation heating:235 ℃(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