YETDA INDUSTRY LTD.

I800LOA4D
8mm Infrared LED Lamps

* 8mm with Infrared Dice.
* Encapsulated with Water Clear Package with 2 leads.

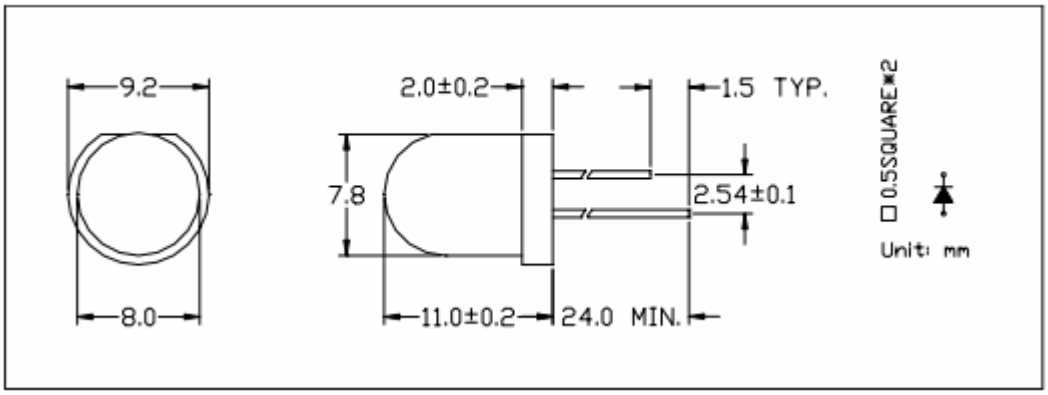
Absolute Maximum Ratings : (Ta=25℃)

Parameter	Symbol	Red	Yellow	Unit
Power Dissipation	PD	100	100	mw
Reverse Voltage	VR	5	5	V
Average Forward Current	LAF	30	30	mA
Peak Forward Current (Duty=0.1,10KHZ)	IPF	200	200	mA
Opertating Temperature Range	TOPR	-20℃ to +80 ℃		
Storage Temperature Range	TSTG	-40℃ to +100 ℃		
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260℃ For 3 Seconds				

Electro-Optical Characteristics （Ta = 25℃）

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	IF = 20mA	VF		1.45	1.6	V
Reverse Current	VR =5V	IR			10	uA
Luminous Intensity	IF = 20mA	Ie		50	70	mW/sr
Spectral Line Half Width	IF=20mA	⊿λ		20		nm
Tenninal Capacitance	F=1MHZ	Ct		20		pF
Peak Emitting Wavelength	IF=20mA	λp		850		nm
Viewing Angle	IF = 20mA	2θ 1/2		30		deg

Item: (8mm) 800



13MAY30S

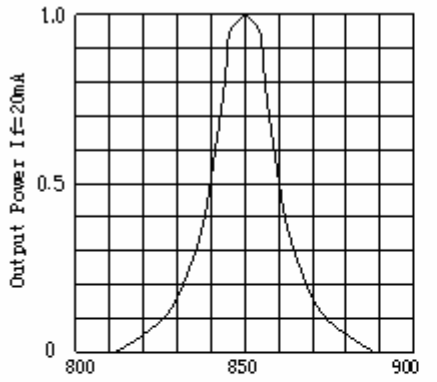


Fig. 1 Relative Luminous Intensity VS. Wavelength(nm)

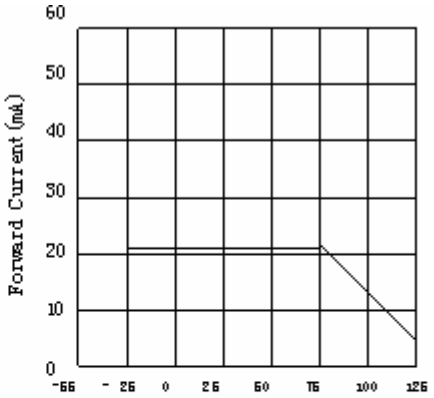


Fig. 2 Forward Current VS. Ambient Temperature(℃)

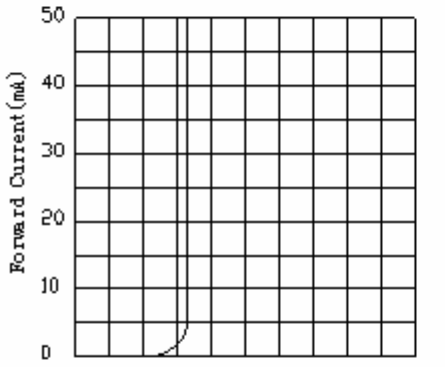


Fig. 3 Forward Current VS. Forward Voltage(V)

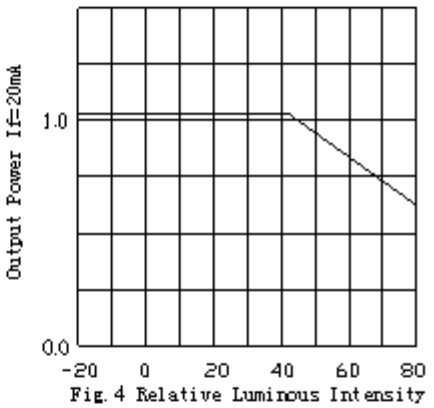


Fig. 4 Relative Luminous Intensity VS. Ambient Temperature(℃)

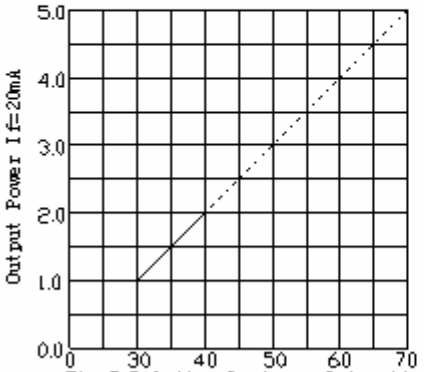


Fig. 5 Relative Luminous Intensity VS. Fofward Current(mA)

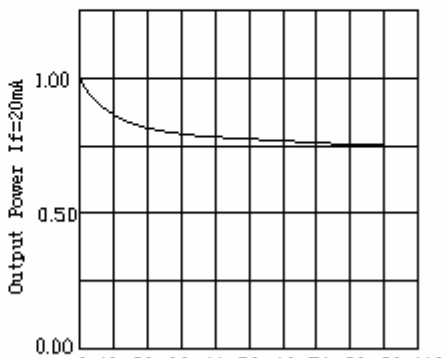


Fig. 6 Relative Luminous Intensity VS. Using Time(kH)

•Soldering:

1. Manual of soldering

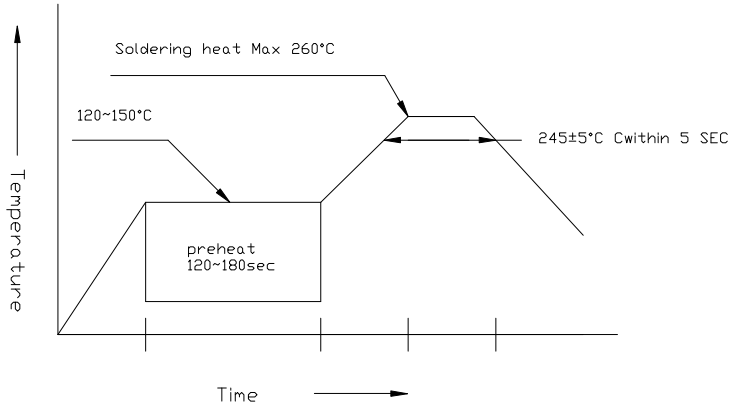
The temperature of the iron tip should not be higher than 260℃and

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)

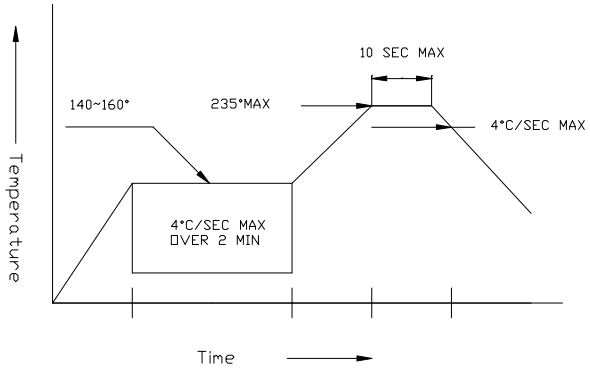


3. Reflow Soldering

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