YETDA INDUSTRY LTD.

3mm Infrared LED Lamps
I300C5G

- 3 mm with GaAIAs dice。
- Encapsulated with Blue-grey diffused Lens package。

* Long leads。

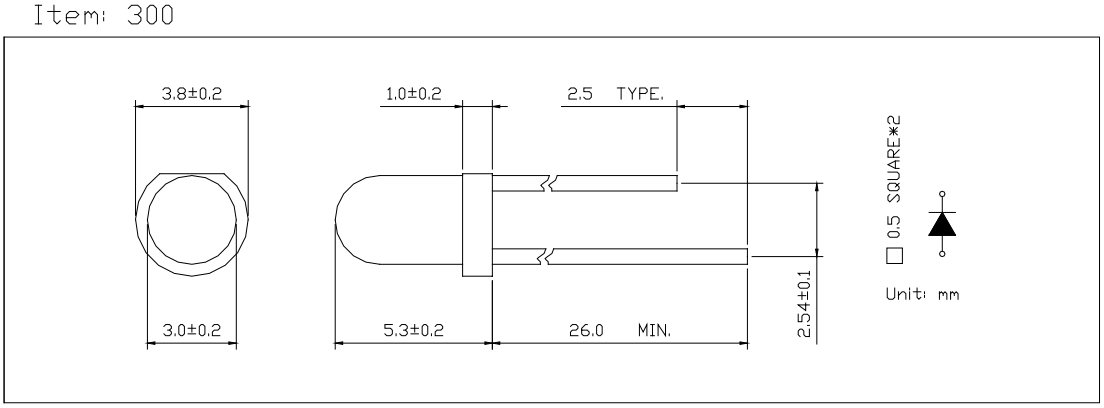
Absolute Maximum Ratings :

Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	40	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	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I_F = 20mA	V_F	1.0	1.25	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	Ee		20		mW/sr
	I_F =100mA, tp=100us, tp/t=0.01			30		
Continuous Forward Current	I_{FC}			40		mA
Viewing Angle	2θ 1/2			25		deg
Peak Emission Wavelength	I_F = 20mA	λ p		940		nm
Power Dissipation		P_D		150		mW

Package



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Typical Electro-Qptical Characteristics Curve:

Fig 1. Forward Current vs. DC Forward Voltage

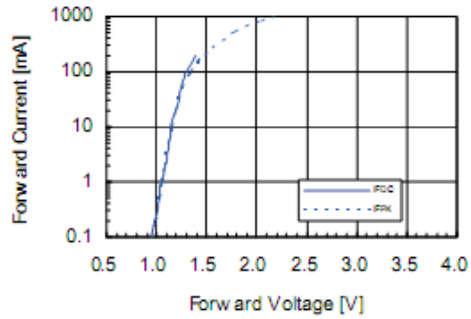


Fig 2. Relative Radian Power vs. Wavelength

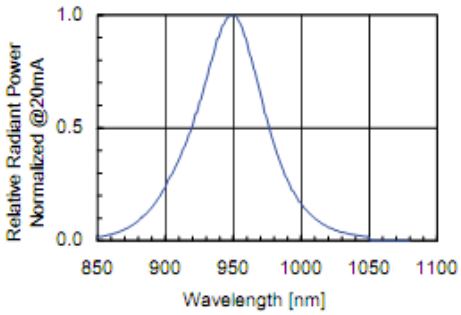


Fig 3. Relative Radiant Power
vs. Forward DC Current

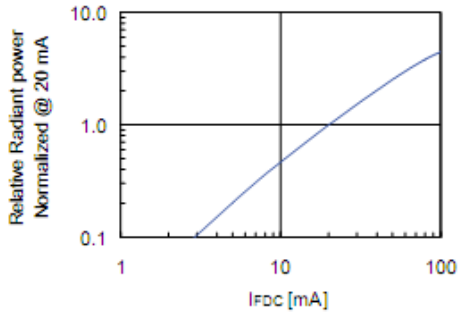


Fig 4. Relative Radiant Power
Vs. Forward Peak Current

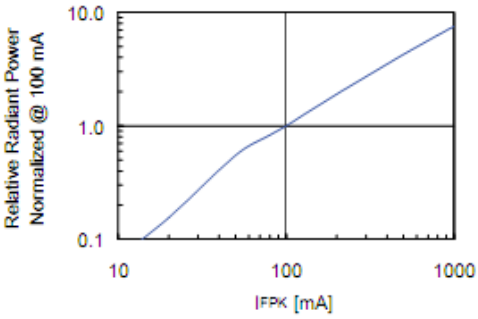


Fig 5. Forward DC Voltage vs. Temperature

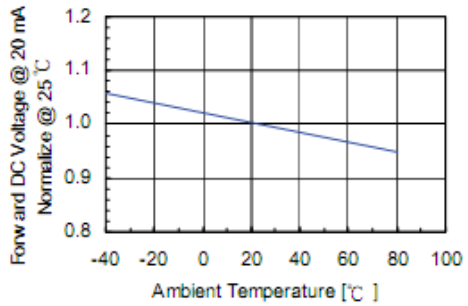
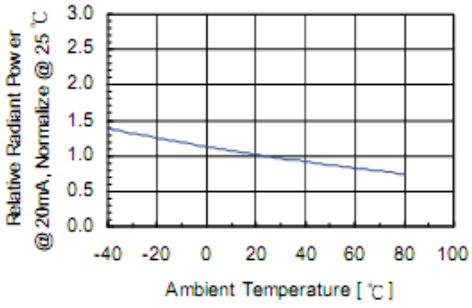


Fig 6. Relative Radiant Power vs. Temperature



•Soldering:

1. Manual of soldering

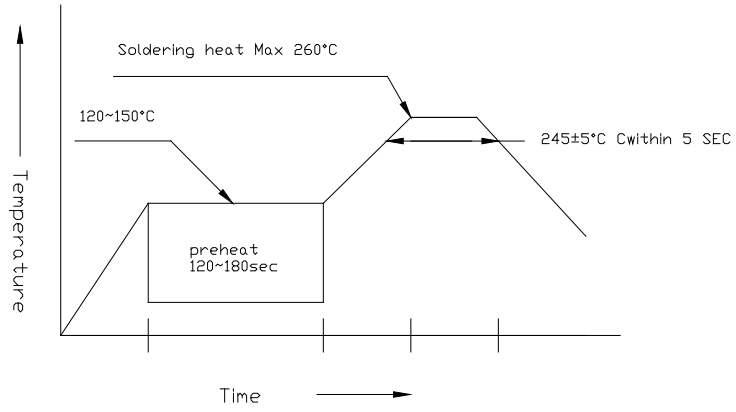
The temperature of the iron tip should not be higher than 260 ℃and

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)

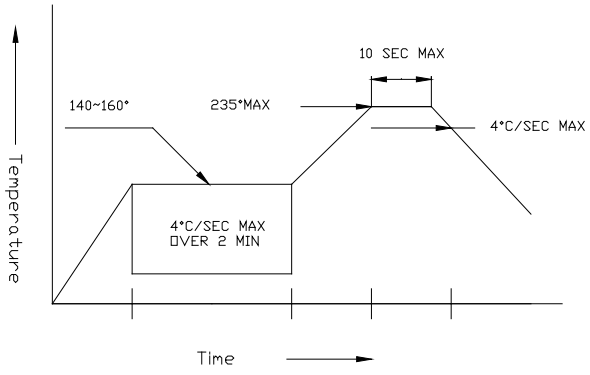


3. Reflow Soldering

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