



YETDA INDUSTRY LTD.

**1.8mm Red Super Bright LED Lamps
Q180ICI1G-BK**

- 1.8 mm with AlGaInP Dice ◦
- Encapsulated with Red Diffused Color Package ◦
- Long Leads ◦

Absolute Maximum Ratings :

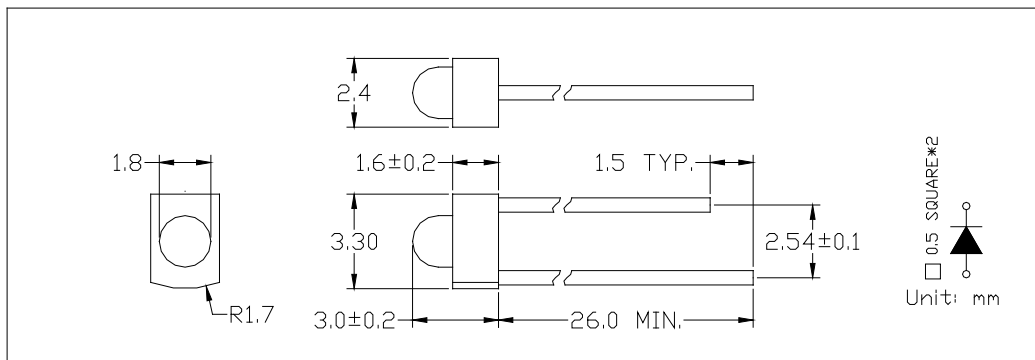
Parameter	Maximum Rating	Unit
Peak Forward Current	90	mA
Continuous Forward Current	20	mA
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature	260°C for 3 seconds 1.6mm(0.063 inch) from body	

Electro-Optical Characteristics (Ta = 25°C)

Parameter Radiant	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	If = 20mA	Vf		2.00	2.40	V
Reverse Current	Vr = 5V	Ir			10	uA
Luminous Intensity	If = 20mA	Iv		1600		mcd
Spectral Bandwidth	If = 20mA	$\Delta\lambda$				nm
Wavelength	If = 20mA	λ_p		635		nm
		λ_d		625		nm
Half View Angle	If = 20mA	2 $\theta_{1/2}$		50		deg

Package

Item: (1.8mm) 180



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Typical Electro-Optical Characteristics Curve:

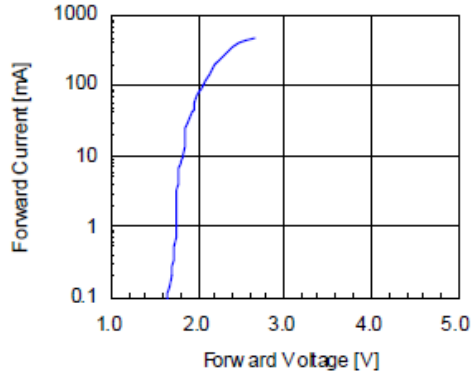


Fig 3. Forward Voltage vs. Temperature

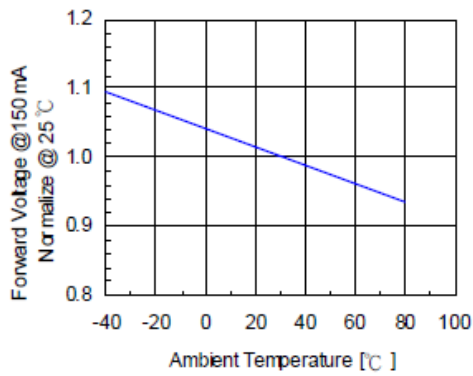


Fig 5. Relative Intensity vs. Wavelength

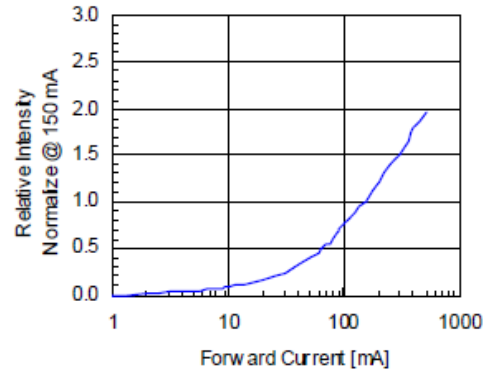
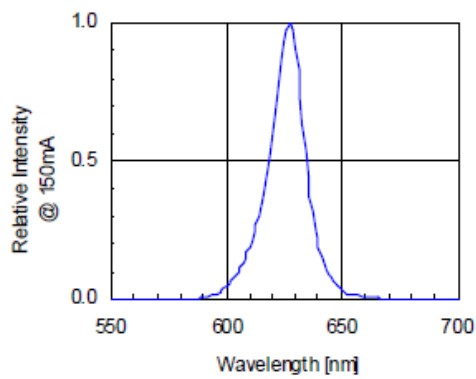
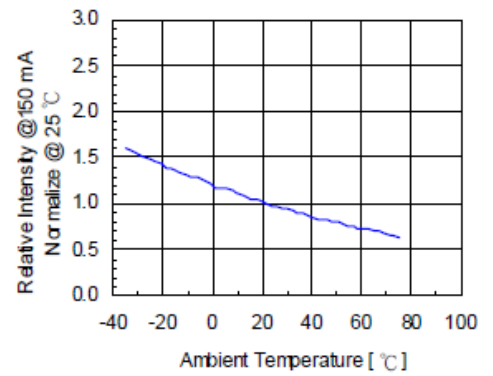


Fig 4. Relative Intensity vs. Temperature





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• Soldering:

1. Manual of soldering

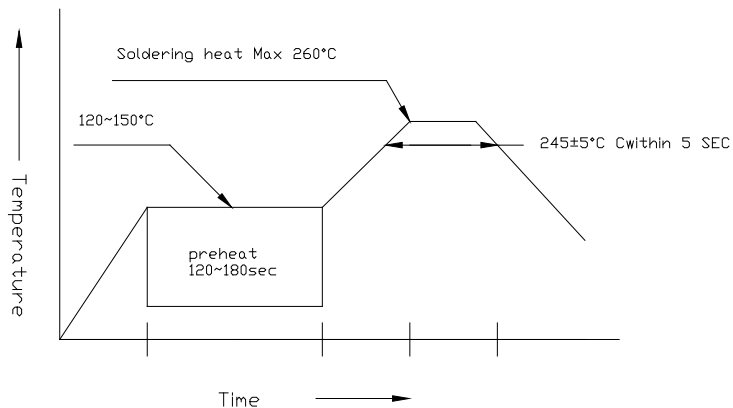
The temperature of the iron tip should not be higher than 260°C and

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)

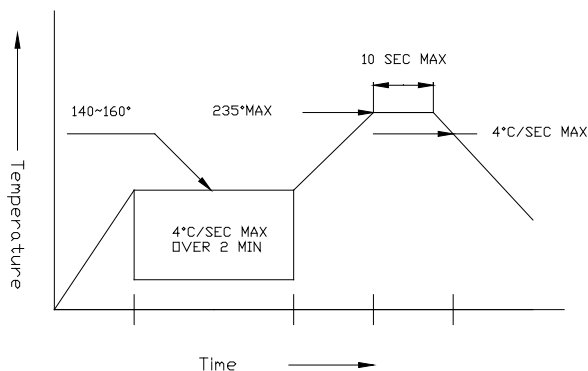


3. Reflow Soldering

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