



YETDA INDUSTRY LTD.

2*5mm Full Color Led 625URGDNB4E

- * 2*5mm Tri color with Super Bright Red and Yellow Green and Blue Dice.
- * Encapsulated with Water Clear Package.
- * Using Patent Blue Chip.

Absolute Maximum Ratings : (Ta=25°C)

Parameter	Symbol	R	G	B	Unit
Power Dissipation	PD	75	75	120	mw
Reverse Voltage	VR	5	5	5	V
Peak Forward Current (Duty=0.1,10KHZ)	I _{fp}	120	120	120	mA
Operating Temperature Range	Top	-20°C to +80			°C
Storage Temperature Range	Tstg	-20°C to +80			°C
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds					

Electro-Optical Characteristics (Ta = 25°C)

Parameter Radiant		Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	R	IF = 20mA	VF	1.9	2.0	2.5	V
	G			1.9	2.0	2.5	
	B			2.8	3.2	3.4	
Reverse Current		VR =5V	IR			10	uA
Luminous Intensity	R	IF = 20mA	I _v	80			mcd
	G			25			
	B			60			
Spectral Bandwidth	R	IF = 20mA	Δλ		20		nm
	G				20		
	B				30		
Dominant wavelenath	R	IF = 20mA	λ _d	625	630	635	nm
	G			568	572	576	
	B			465	470	475	
Wavelength	R	IF = 20mA	λ _p		640		nm
	G				572		
	B				465		
Half View Angle		IF = 20mA	θ 1/2		70		deg



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(RED) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

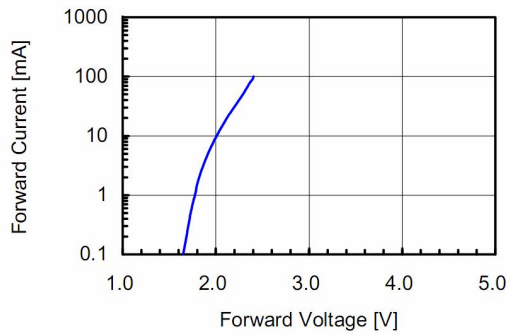


Fig 2. Relative Intensity vs. Forward Current

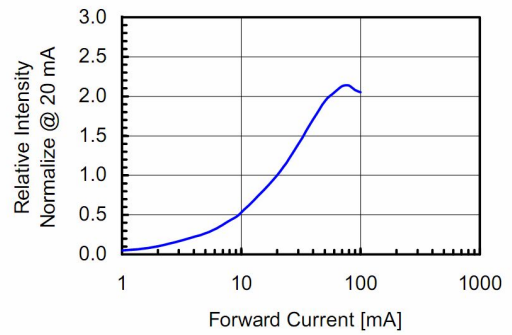


Fig 3. Forward Voltage vs. Temperature

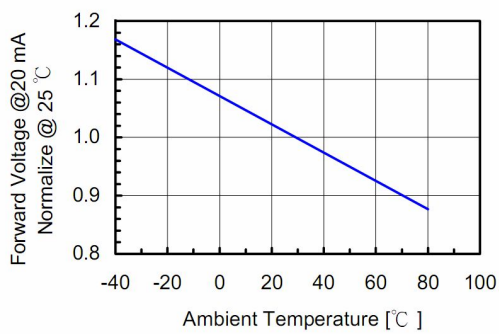


Fig 4. Relative Intensity vs. Temperature

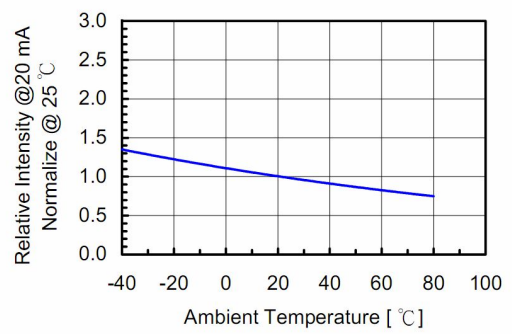
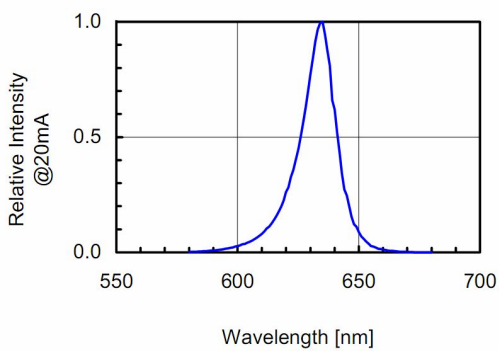


Fig 5. Relative Intensity vs. Wavelength





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(GREEN) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

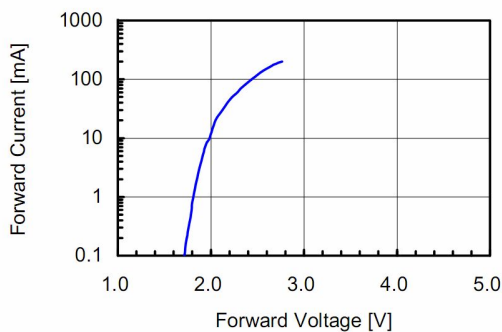


Fig 2. Relative Intensity vs. Forward Current

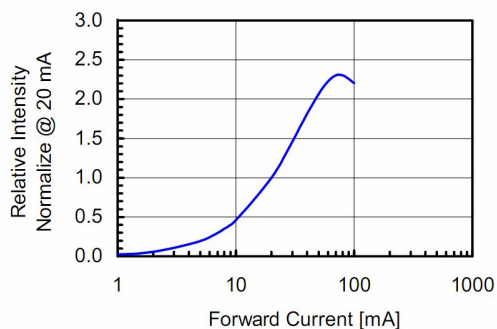


Fig 3. Forward Voltage vs. Temperature

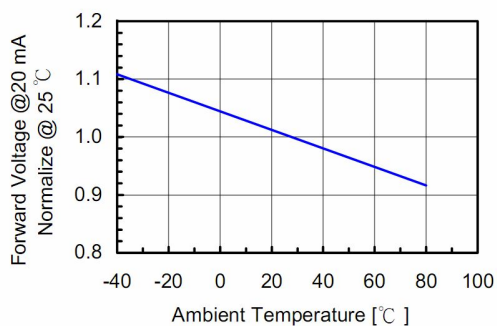


Fig 4. Relative Intensity vs. Temperature

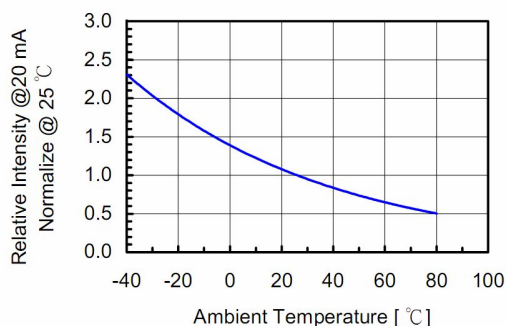
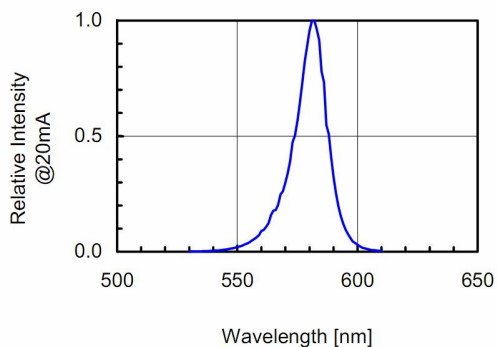


Fig 5. Relative Intensity vs. Wavelength





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(BLUE) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

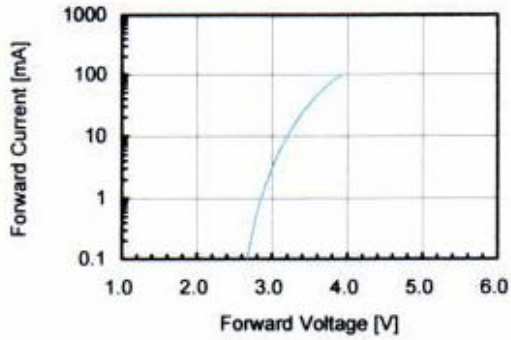


Fig 2. Relative Intensity vs. Forward Current

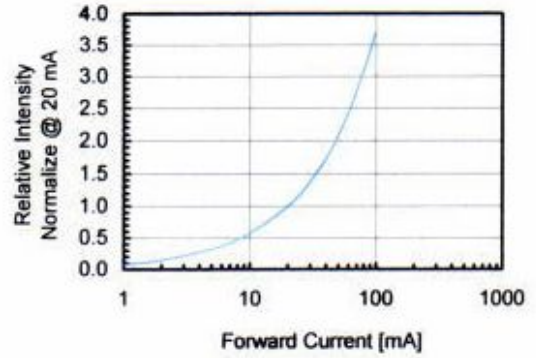


Fig 3. Forward Voltage vs. Temperature

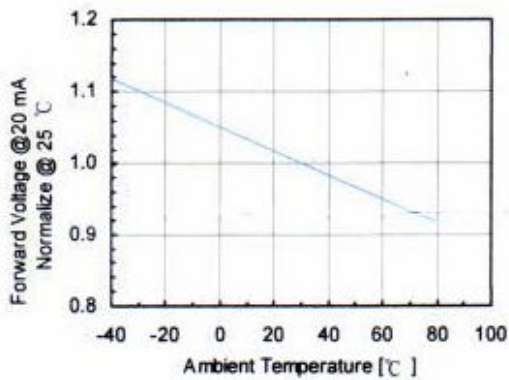


Fig 4. Relative Intensity vs. Temperature

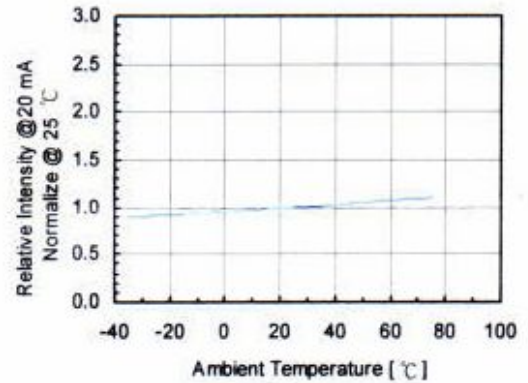
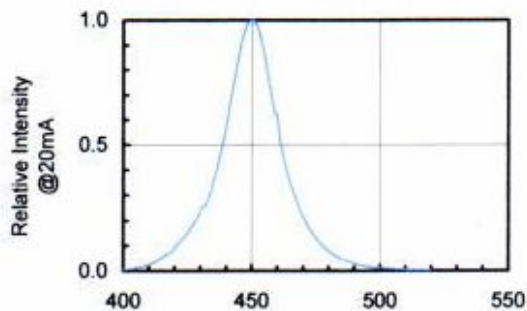


Fig 5. Relative Intensity vs. Wavelength





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• Soldering:

1. Manual of soldering

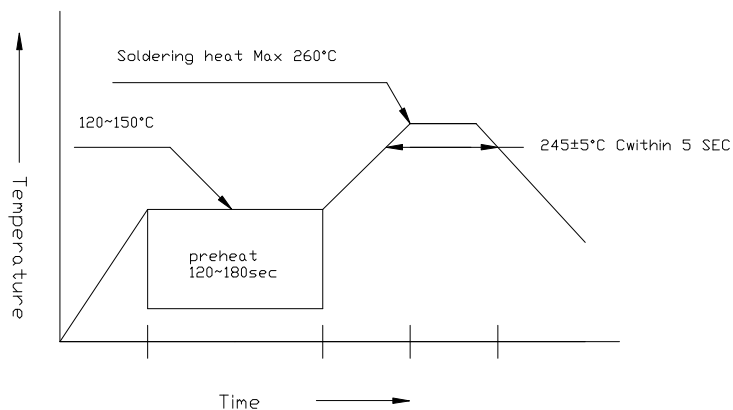
The temperature of the iron tip should not be higher than 260°C and

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)

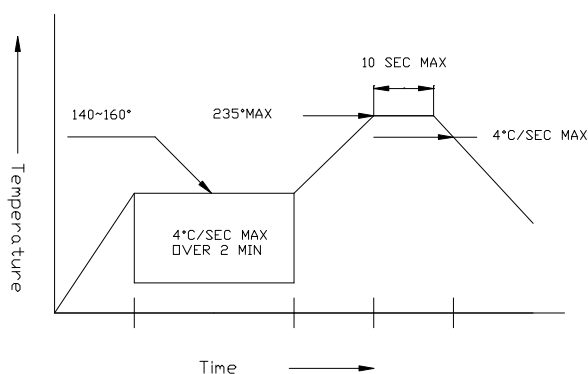


3. Reflow Soldering

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