

#### 2\*5mm Full Color Led 625URCGCB4E

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

#### Absolute Maximum Ratings : ( $Ta=25^{\circ}C$ )

Parameter	Symbol	R	G	В	Unit				
Power Dissipation	PD	75	75	120	mw				
Reverse Voltage	VR	5	5	5	V				
Peak Forward Current (Duty=0.1,10KHZ)	Ifp	120	120	120	mA				
Operating Temperature Range	Тор	-20°C to +80 °C							
Storage Temperature Range	Tstg	<b>-20</b> ℃	to +	80	$^{\circ}\!\mathrm{C}$				
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260℃ For 3 Seconds									

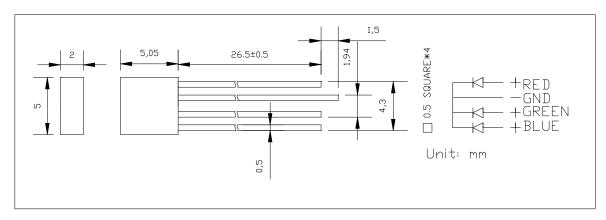
### Electro-Optical Characteristics (Ta = 25 $^{\circ}$ C)

Parameter Radiant		Test Condition	Symbol	Min.	Typ.	Max.	Unit
	R			1.9	2.0	2.5	
Forward Voltage	G	IF = 20mA	VF	2.8	3.2	3.8	V
	В			2.8	3.2	3.8	
Reverse Current		VR =5V	IR			10	uA
Luminous Intensity	R	IF = 20mA	lv	80			mcd
	G			120			
	В			100			
Spectral Bandwidth	R	IF = 20mA	Δλ		20		nm
	G				30		
	В				30		
Dominant wavelength	R	IF = 20mA	λd	625	630	635	nm
	G			520	525	530	
	В			465	470	475	
Wavelength	R	IF = 20mA	λp		640		nm
	G				525		
	В				467		
Half View Angle		IF = 20mA	θ 1/2		70		deg



#### **Package**

Item: 625RGB





#### (RED) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

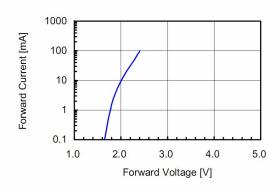


Fig 2. Relative Intensity vs. Forward Current

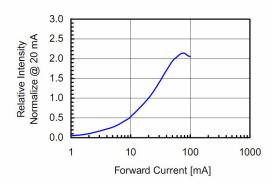


Fig 3. Forward Voltage vs. Temperature

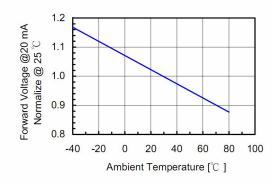


Fig 4. Relative Intensity vs. Temperature

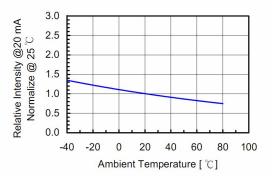
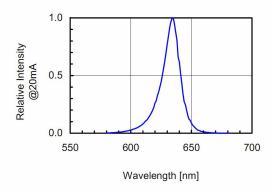


Fig 5. Relative Intensity vs. Wavelength



#### (GREEN) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

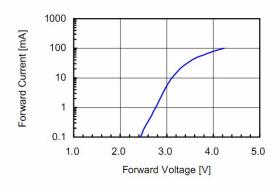


Fig 2. Relative Intensity vs. Forward Current

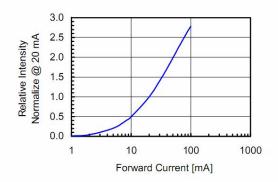


Fig 3. Forward Voltage vs. Temperature

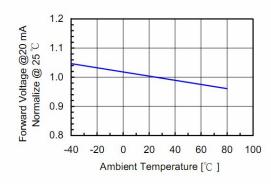


Fig 4. Relative Intensity vs. Temperature

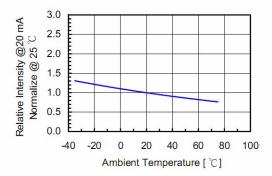
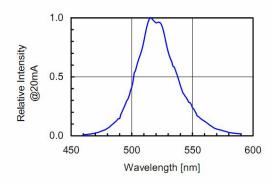


Fig 5.Relative Intensity vs. Wavelength





#### (BLUE) Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

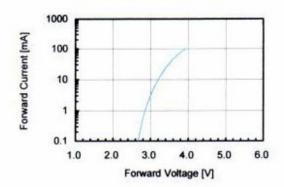


Fig 2. Relative Intensity vs. Forward Current

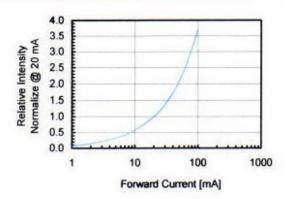


Fig 3. Forward Voltage vs. Temperature

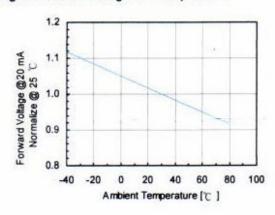


Fig 4. Relative Intensity vs. Temperature

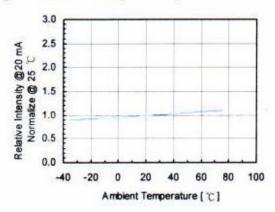
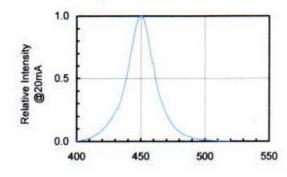


Fig 5. Relative Intensity vs. Wavelength



#### • Soldering:

#### 1. Manual of soldering

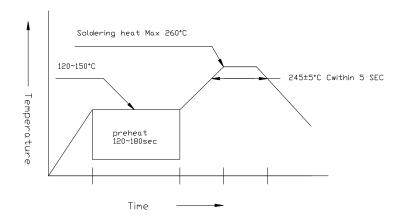
The temperature of the iron tip should not be higher than  $260^{\circ}\text{C}$  and

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

2. DIP soldering (Wave Soldering):

Preheating:  $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$  within 5 sec.  $260^{\circ}\text{C}$  (Max)

Gradual Cooling (Avoid quenching)

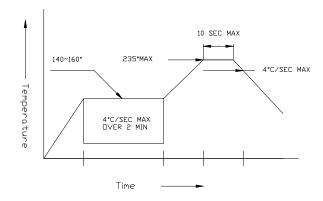


#### 3. Reflow Soldering

Preheating:  $140^{\circ}\text{C} \sim 160^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , 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