



# YETDA INDUSTRY LTD.

## 5mm Full Color Led Lamps 500RGB2E

5mm with Red and Pure Green and Blue Dice.

Encapsulated with Milky color Package.

Blue Dice with Patent.

### Absolute Maximum Ratings :

| Parameter                   | Maximum Rating                                   | Unit |
|-----------------------------|--|------|
| Peak Forward Current        | 120  | mA   |
| Continuous Forward Current  | 30   | mA   |
| Operating Temperature Range | - 40 to + 85                                     |      |
| Storage Temperature Range   | - 50 to + 100                                    |      |
| Lead Soldering Temperature  | 260 for 3 seconds<br>1.6mm(0.063 inch) from body |      |

### Electro-Optical Characteristics ( Ta = 25 )

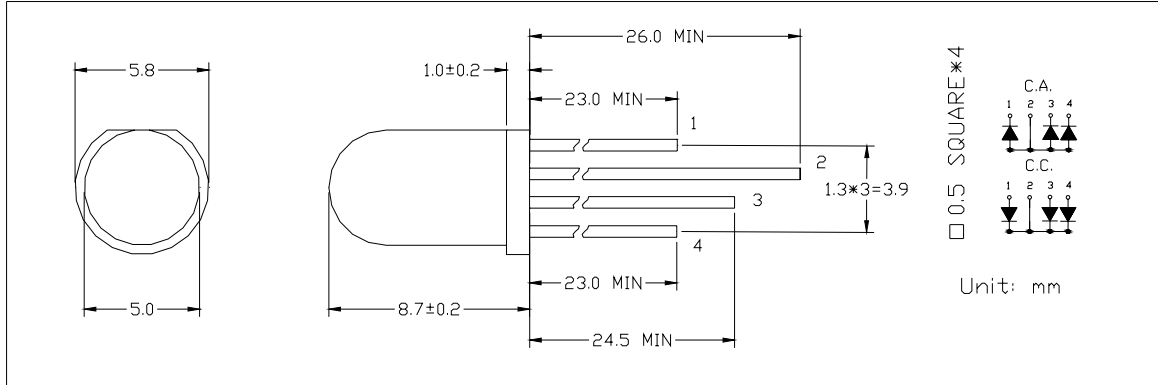
| Parameter Radiant  | Test Condition | Symbol | Min. | Typ. | Max. | Unit |    |
|--------------------|----------------|--------|------|------|------|------|----|
| Forward Voltage    | If = 20mA      | R      | 1.80 | 1.95 | 2.35 | V    |    |
|                    |                | G      | 3.0  | 3.3  | 3.6  |      |    |
|                    |                | B      | 3.0  | 3.3  | 3.6  |      |    |
| Reverse Current    | Vr = 5V        | Ir     |      |      | 50   | uA   |    |
| Luminous Flux      | If = 20mA      | R      | 200  | 300  | 500  | mcd  |    |
|                    |                | G      | 1200 | 1700 | 2200 |      |    |
|                    |                | B      | 700  | 1000 | 1300 |      |    |
| Spectral Bandwidth | If = 20mA      | R      |      | 25   |      | nm   |    |
|                    |                | G      |      | 30   |      |      |    |
|                    |                | B      |      | 30   |      |      |    |
| Wavelength         | If = 20mA      | p      |      |      |      | nm   |    |
|                    |                | d      | R    | 640  | 643  | 645  | nm |
|                    |                |        | G    | 510  | 515  | 520  |    |
| B                  | 465            |        | 468  | 470  |      |      |    |
| Half View Angle    | If = 20mA      | 2 θ1/2 |      | 20   |      | deg  |    |



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## Package

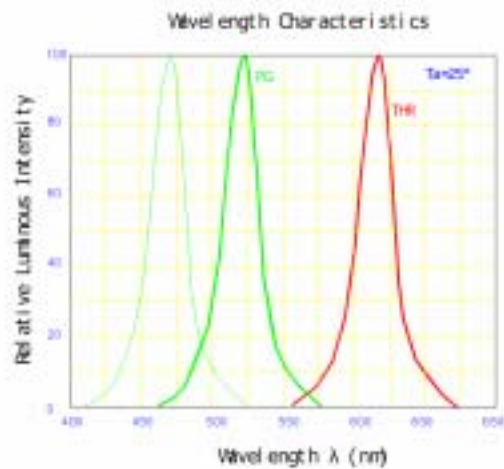
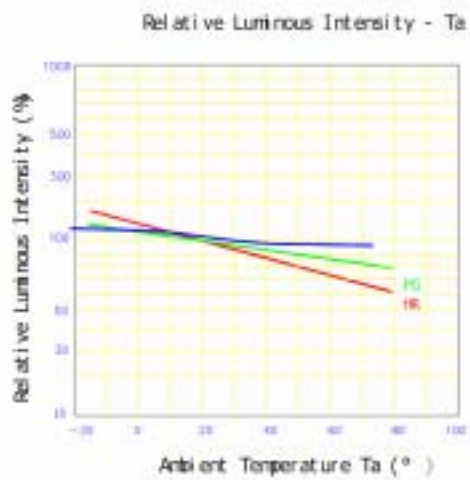
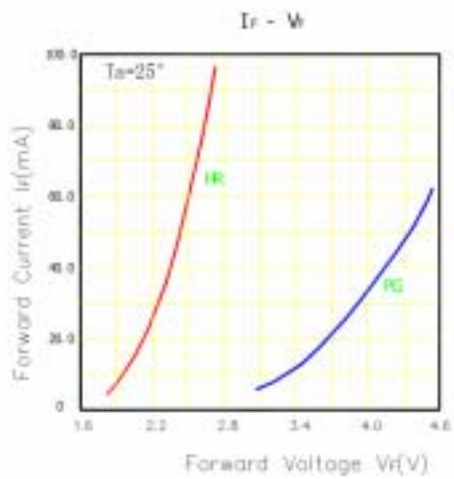
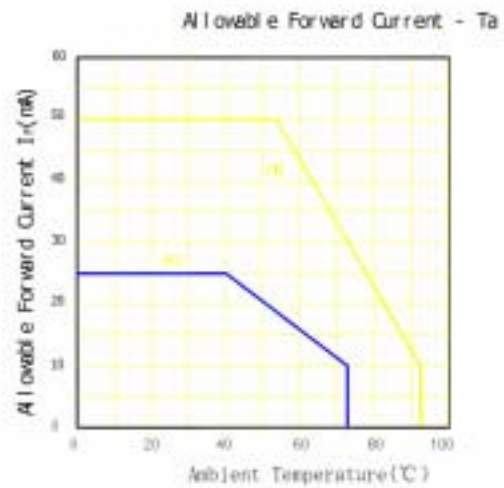
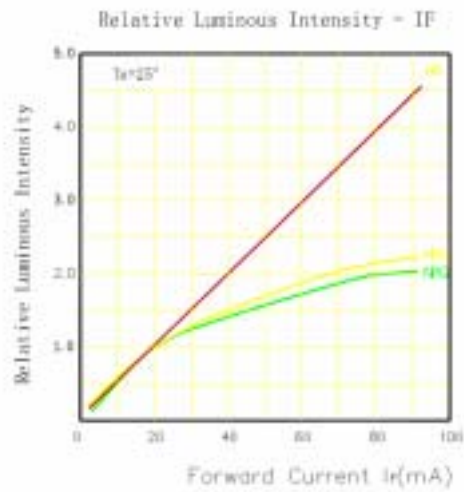
Item: 500RGB





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## Typical Electro-Optical Characteristics Curve:





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## Soldering:

### 1. Manual of soldering

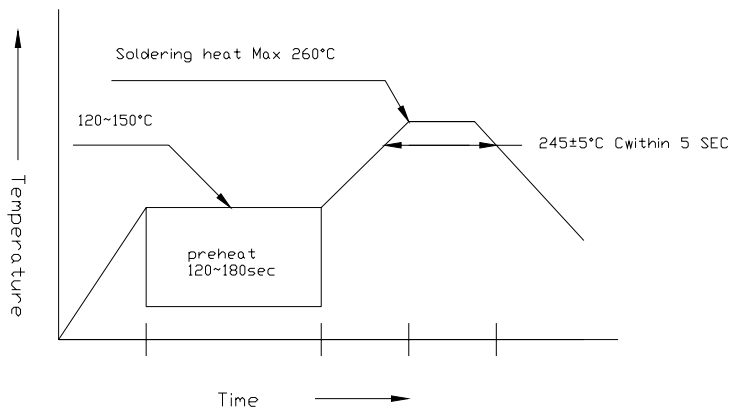
The temperature of the iron tip should not be higher than 260 and

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)

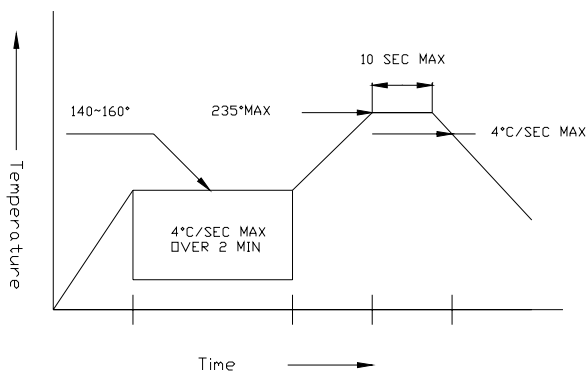


### 3. Reflow Soldering

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