

## F300ICHTG2K-CA 3mm Red + Green Bi Color LED Lamps

- \* 3mm Bi-color with AlGaInP and InGaN Dice.
- \* Encapsulated with diffused Package with 3 leads.
- \* Common Anode

## **Absolute Maximum Ratings:** (Ta=25°C)

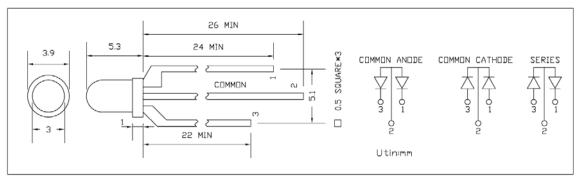
Parameter	Symbol	Red	Green	Unit			
Power Dissipation	PD	100	100	mw			
Reverse Voltage	VR	5	5	V			
Average Forward Current	Laf	30	30	mA			
Peak Forward Current (Duty=0.1,10KHZ)	IPF	200	200	mA			
Opertating Temperature Range	Topr	-20°C to +80 °C					
Storage Temperature Range	Tstg	-40°C to +100 °C					
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds							

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

Parameter		Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	Red	In - 20 A	N/m		2.2	2.4	V
	Green	$I_F = 20 \text{mA}$	VF		3.2	3.8	
Reverse Current		$V_R = 5V$	IR			10	uA
Luminous Intensity	Red	I <sub>F</sub> = 20mA	Iv	400	500		mcd
	Green			700	1000		mcd
Wavelength	Red	I <sub>F</sub> = 20mA	λ <b>D</b>		625		nm
	Green				525		nm
Viewing Angle		$I_F = 20 \text{mA}$	2 <b>θ</b> 1/2		80		deg

## Package

#### Item:F300XX



## **Typical Electro-Qptical Characteristics Curve: for Green**

Fig 1. Forward Current vs. Forward Voltage

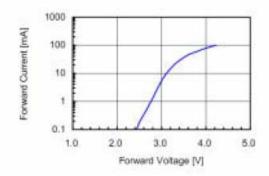


Fig 2. Relative Intensity vs. Forward Current

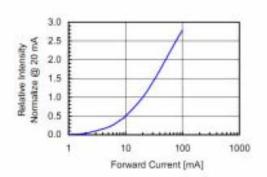
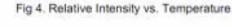
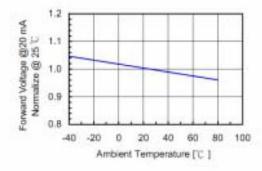


Fig 3. Forward Voltage vs. Temperature





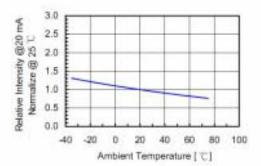
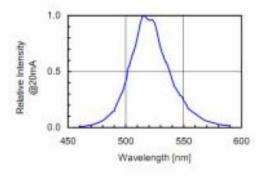


Fig 5.Relative Intensity vs. Wavelength



## **Typical Electro-Qptical Characteristics Curve: for Red**

Fig 1. Forward Current vs. Forward Voltage

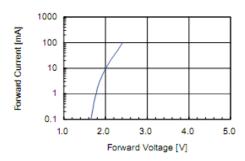


Fig 2. Relative Intensity vs. Forward Current

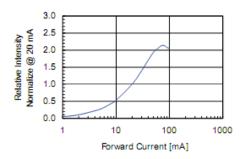


Fig 3. Forward Voltage vs. Temperature

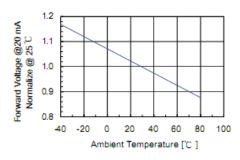


Fig 4. Relative Intensity vs. Temperature

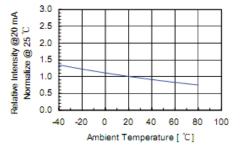
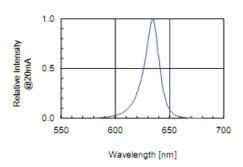


Fig 5. Relative Intensity vs. Wavelength



### •Soldering:

1. Manual of soldering

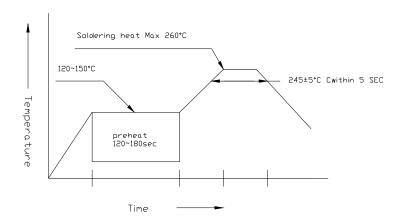
The temperature of the iron tip should not be higher than 260°C and

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)

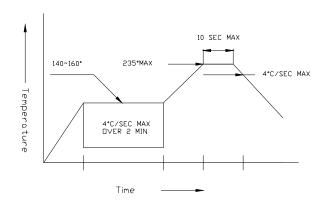


#### 3. Reflow Soldering

Preheating:  $140^{\circ}$ C ~  $160^{\circ}$ C ±  $5^{\circ}$ C, within 2 minutes.

Operation heating:  $235^{\circ}$ 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