

## F300HCHHCY4K-CC 3mm Red + Yellow Bi Color LED Lamps

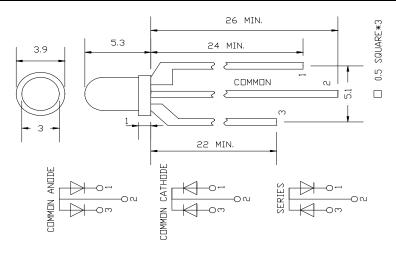
- \* 3mm Bi-color with Super Bright Red and Yellow Dice.
- \* Encapsulated with Water Clear Package with 3 leads.
- \* Common Cathode

## **Absolute Maximum Ratings : ( Ta=25℃ )**

Parameter	Symbol	Red	Red Yellow					
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	$I_F = 20 \text{mA}$	VF		2.0	2.4	V
	Yellow				2.0	2.4	
Reverse Current		$V_R = 5V$	IR			10	uA
Luminous Intensity	Red	$I_F = 20 \text{mA}$	Iv	900	1200		mcd
	Yellow			800	1000		mcd
Wavelength	Red	$I_F = 20 \text{mA}$	λъ		625		nm
	Yellow				592		nm
Viewing Angle		$I_F = 20 \text{mA}$	2 <b>θ</b> 1/2		20		deg



#### **13APR04H**

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

Fig 1. Forward Current vs. Forward Voltage

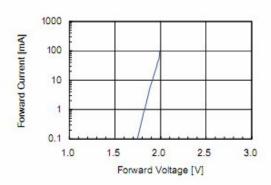


Fig 2. Relative Intensity vs. Forward Current

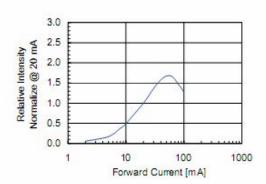


Fig 3. Forward Voltage vs. Temperature

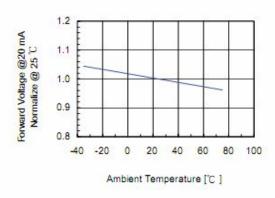


Fig 4. Relative Intensity vs. Temperature

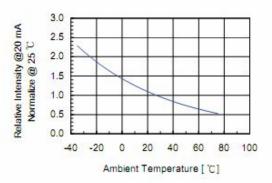
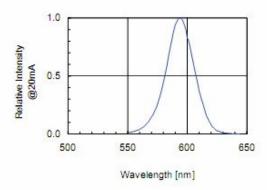


Fig 5. Relative Intensity vs. Wavelength



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

Fig 1. Forward Current vs. Forward Voltage

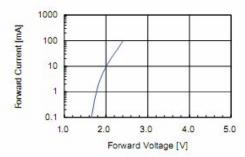


Fig 2. Relative Intensity vs. Forward Current

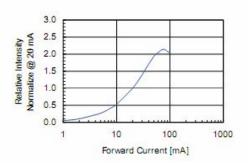


Fig 3. Forward Voltage vs. Temperature

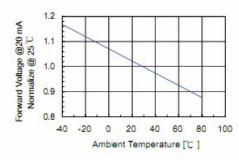


Fig 4. Relative Intensity vs. Temperature

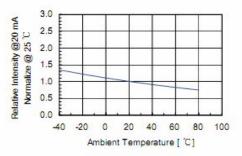
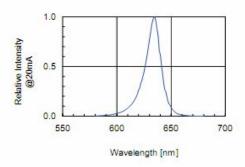


Fig 5. Relative Intensity vs. Wavelength



#### •Soldering:

1. Manual of soldering

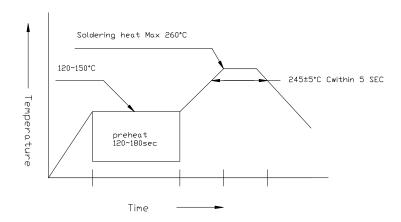
The temperature of the iron tip should not be higher than  $260^{\circ}$ C and

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

2. DIP soldering (Wave Soldering):

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

Gradual Cooling (Avoid quenching)

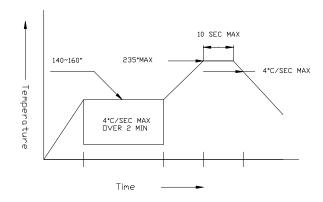


### 3. Reflow Soldering

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