

3mm Red+ Green LED Lamps with Holder YD-309EGM-1HD

* 3mm Red and Green Dice.

* Encapsulated with Color Diffused Package with holder.

Absolute Maximum Ratings :

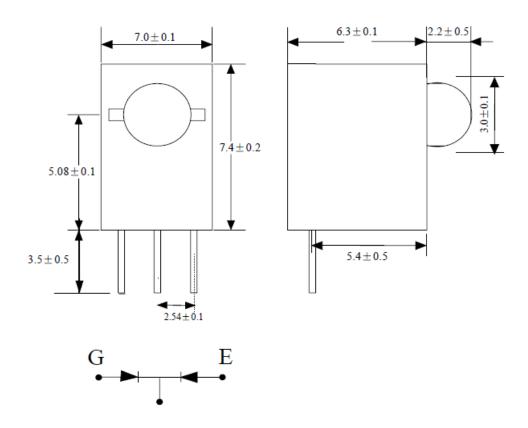
Parameter	Maximum Rating	Unit			
Peak Forward Current	120	mA			
Continuous Forward Current	25	mA			
Operating Temperature Range	$-20^{\circ}C \text{ to} + 75^{\circ}C$				
Storage Temperature Range	$-40^{\circ}\mathrm{C} \text{ to} + 80^{\circ}\mathrm{C}$				
Lead Soldering Temperature	260° C for 3 seconds				
	1.6mm(0.063 inch) from body				

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

Parameter		Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	Red	IF = 20mA	VF	2.0	2.2	2.3	V
	Green			2.0	2.2	2.5	
Reverse Current		VR =5V	IR			10	uA
Luminous Intensity	Red	IF = 20mA	Iv	30	40	50	mcd
	Green			20	30	40	
Wavelength	Red	IF = 20mA	2	647	650	653	nm
	Green		λd	565	568	573	
Viewing Angle		IF = 20mA	θ 1/2		60		deg

Package :

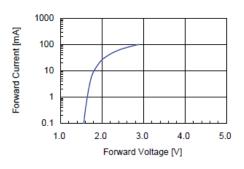




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Fig 1. Forward Current vs. Forward Voltage





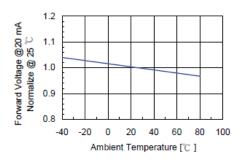


Fig 5. Relative Intensity vs. Wavelength

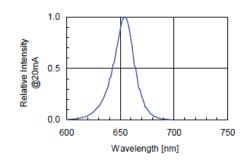


Fig 2. Relative Intensity vs. Forward Current

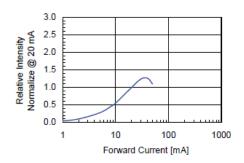
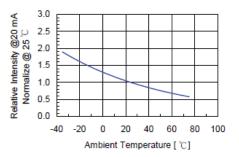


Fig 4. Relative Intensity vs. Temperature

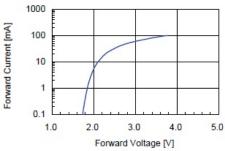


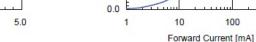




Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage





Relative Intensity Normalize @ 20 mA

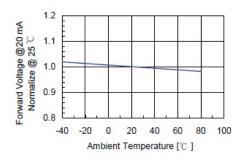
3.0 2.5

2.0 1.5

1.0

0.5







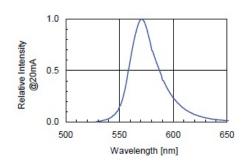
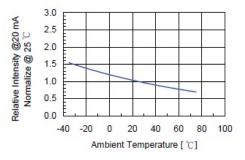


Fig 4. Relative Intensity vs. Temperature



1000

100

Fig 2. Relative Intensity vs. Forward Current



•Soldering:

1. Manual of soldering

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

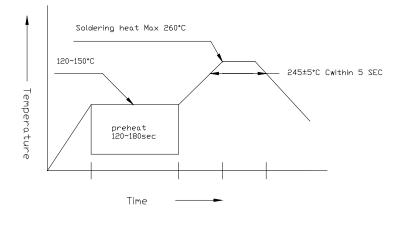
°Cand

Soldering within 3 seconds per solder-land is to be observed 2. DIP soldering (Wave Soldering):

Preheating:120

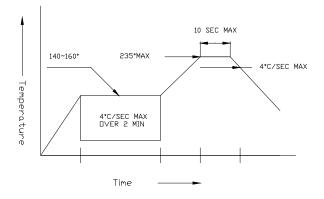
 $^{\circ}\text{C}^{\sim}150^{\circ}\text{C}$ within 5 sec.260 $^{\circ}\text{C}(\text{M}\,\text{ax})$

Gradual Cooling (Avoid quenching)



3. Reflow SolderingPreheating:140Operation heating:235Gradual Cooling (Avoid quenching)

°C~160°C ±5°C,within 2 minutes. °C(Max)within 10 seconds(Max)



•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