

YETDA INDUSTRY LTD.

5mm Oval Yellow LED Lamps Q546ICY1D

5mm Oval with AlGaInP Super bright Dice \circ Encapsulated with Yellow Diffused Color Package \circ Long Leads \circ

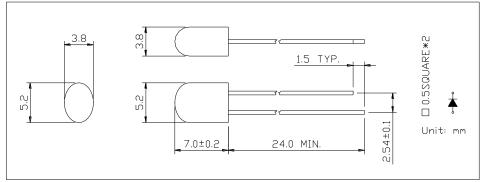
Absolute Maximum Ratings : (Ta=25℃)

Parameter	Symbol	Maximum Rating	Unit			
Power Dissipation	PD	100	mw			
Reverse Voltage	Vr	5	V			
Average Forward Current	Laf	30	mA			
Peak Forward Current (Duty=0.1,10KHZ)	IPF	200	mA			
Opertating Temperature Range	Topr	-20°C to +80	$^{\circ}\!\mathrm{C}$			
Storage Temperature Range	Tstg	-40°C to +100	$^{\circ}\! \mathbb{C}$			
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	$I_F = 20mA$	VF	2.0	2.2	2.4	V
Reverse Current	V _R =5V	IR			10	uA
Luminous Intensity	IF = 20mA	Iv	780	1300		mcd
Wavelength	$I_F = 20 \text{mA}$	λ p		590		
		λd				
Viewing Angle	$I_F = 20 \text{mA}$	2 θ 1/2		110/40		deg

Item: 546





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Fig 1. Forward Current vs. Forward Voltage

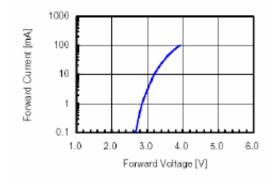


Fig 3. Forward Voltage vs. Temperature

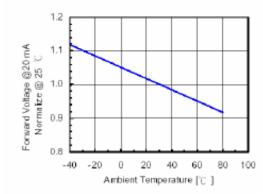


Fig 5.Relative Intensity vs. Wavelength

Fig 2. Relative Intensity vs. Forward Current

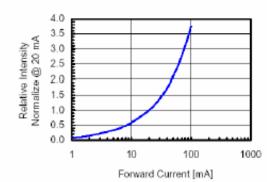
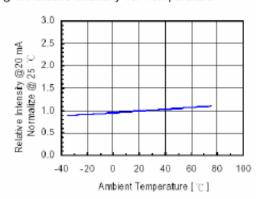


Fig 4. Relative Intensity vs. Temperature



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•Soldering:

1. Manual of soldering

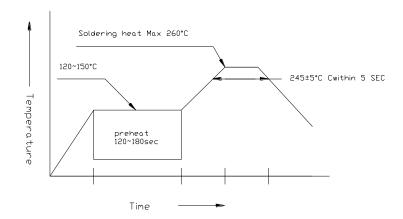
The temperature of the iron tip should not be higher than 260° C and

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

2. DIP soldering (Wave Soldering):

Preheating: 120° C ~ 150° C within 5 sec. 260° C (Max)

Gradual Cooling (Avoid quenching)

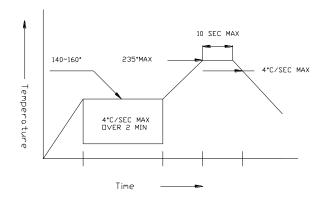


3. Reflow Soldering

Preheating: 140° C ~ 160° C ± 5° 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