

YETDA INDUSTRY LTD.

5mm Oval Red LED Lamps Q546INI1D-BK

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

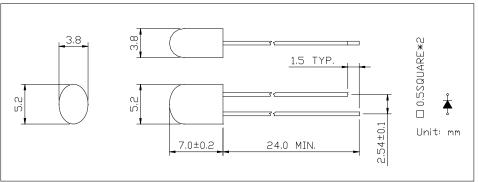
Absolute Maximum Ratings : (Ta=25℃)

Parameter	Symbol	Maximum Rating	Unit			
Power Dissipation	PD	85	mw			
Reverse Voltage	VR	5	V			
Average Forward Current	Laf	20	mA			
Peak Forward Current (Duty=0.1,10KHZ)	IPF	75	mA			
Opertating Temperature Range	Topr	-25°C to +85	$^{\circ}\! \mathbb{C}$			
Storage Temperature Range	Tstg	-35°C to +85	$^{\circ}\! \mathbb{C}$			
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds						

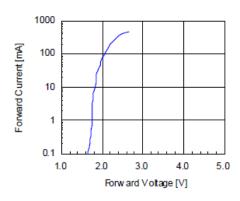
Electro-Optical Characteristics ($Ta = 25^{\circ}C$)

Parameter	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	$I_F = 20mA$	VF	1.8	2.0	2.6	V
Reverse Current	$V_R = 5V$	IR			10	uA
Luminous Intensity	$I_F = 20 \text{mA}$	Iv	500	650	800	mcd
Wavelength	$I_F = 20 \text{mA}$	λ p	620	625	630	
Viewing Angle	$I_F = 20mA$	2 0 1/2		100/40		deg

Item: 546



YETDA INDUSTRY LTD.



3.0 2.5 2.5 2.0 2.0 0.0 1 10 100 1000 Forward Current [mA]

Fig 3. Forward Voltage vs. Temperature

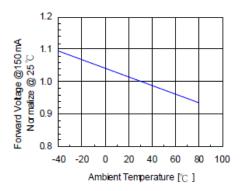


Fig 4. Relative Intensity vs. Temperature

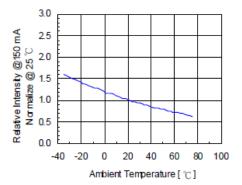
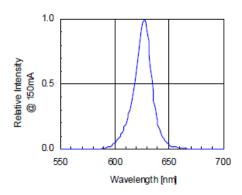


Fig 5. Relative Intensity vs. Wavelength



YETDA INDUSTRY LTD.

•Soldering:

1. Manual of soldering

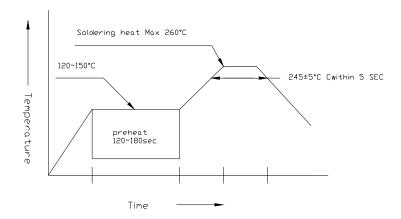
The temperature of the iron tip should not be higher than 260°C and

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°C (Max)

Gradual Cooling (Avoid quenching)

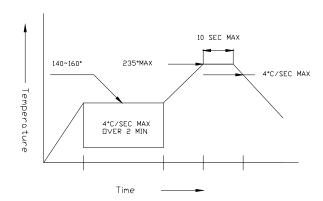


3. Reflow Soldering

Preheating: $140^{\circ}\text{C} \sim 160^{\circ}\text{C} \pm 5^{\circ}\text{C}$, 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