

YETDA INDUSTRY LTD.

3mm Red Low Current LED Lamps U300D1G-D

3 mm with AIGaAs/GaAs dice $\,^{\circ}$ Encapsulated with Red Diffused package $\,^{\circ}$ Long Leads $\,^{\circ}$

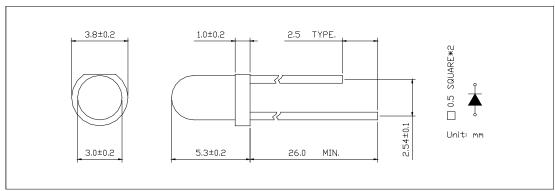
Absolute Maximum Ratings: (Ta=25°C)

Parameter	Symbol	Maximum Rating	Unit				
Power Dissipation	PD	14	mw				
Reverse Voltage	VR	5	V				
Average Forward Current	LAF	30	mA				
Peak Forward Current (Duty=0.1,10KHZ)	IPF	120	mA				
Opertating Temperature Range	Topr	-20°C to +80	$^{\circ}\! \mathbb{C}$				
Storage Temperature Range	Tstg	-40°C to +100	$^{\circ}\! C$				
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	$I_F = 2mA$	VF		1.7	2.0	V
Reverse Current	V _R =5V	IR	5			uA
Luminous Intensity	$I_F = 2mA$	Iv	0.8	2.1		mcd
Wavelength	$I_F = 2mA$	λd		640		nm
Viewing Angle	$I_F = 2mA$	2 θ 1/2		80		deg







YETDA INDUSTRY LTD.

Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

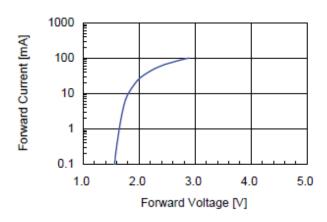


Fig 2. Relative Intensity vs. Forward Current

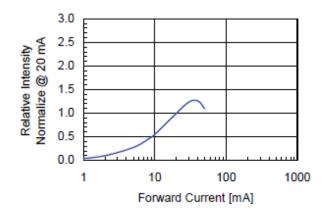


Fig 3. Forward Voltage vs. Temperature

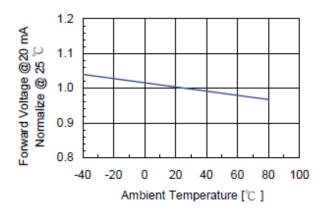


Fig 4. Relative Intensity vs. Temperature

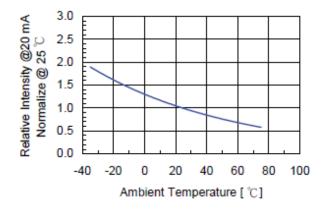
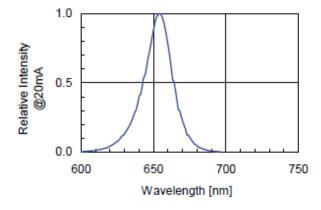


Fig 5. Relative Intensity vs. Wavelength





YETDA INDUSTRY LTD.

•Soldering:

1. Manual of soldering

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

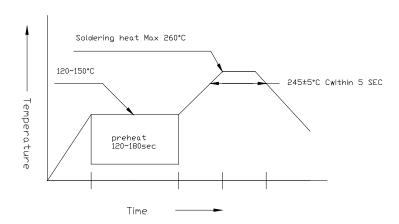
Soldering within 3 seconds per solder-land is to be observed

2. DIP soldering (Wave Soldering):

Preheating:120

°C~150°C within 5 sec.260°C(Max)

Gradual Cooling (Avoid quenching)



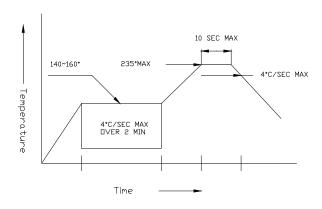
3. Reflow Soldering

Preheating:140

Operation heating:235

Gradual Cooling (Avoid quenching)

\$C~160°C±5°C.within 2 minute °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