



YETDA INDUSTRY LTD.

5mm Tombstone Red Diffused LED Lamps 516H1D

5mm Tombstone with GaP Dice ◦

Encapsulated with Red Diffused Package ◦

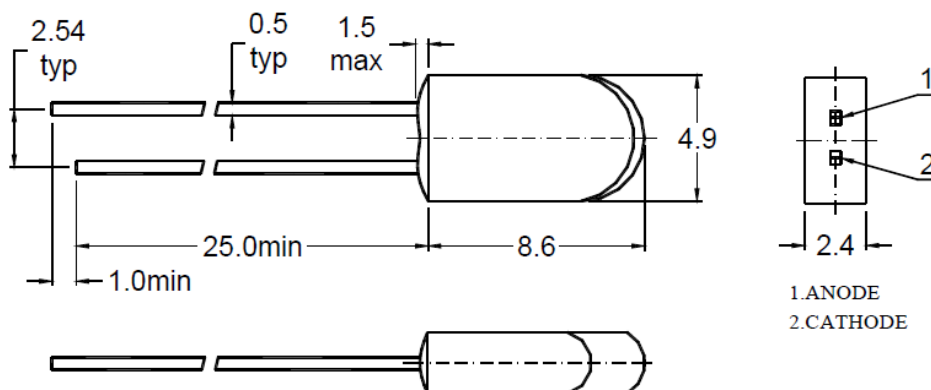
Long Leads ◦

Absolute Maximum Ratings : (Ta=25°C)

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
Operatating Temperature Range	T _{OPR}	-20°C to +80	°C
Storage Temperature Range	T _{STG}	-40°C to +85	°C
Lead Soldering Temperature { 1.6mm(0.063inch) From Body } 260°C For 3 Seconds			

Electro-Optical Characteristics (Ta = 25°C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I _F = 20mA	V _F		2.2	2.6	V
Reverse Current	V _R = 5V	I _R			10	uA
Luminous Intensity	I _F = 20mA	I _v	1.6	4.		mcd
Wavelength	I _F = 20mA	λ _p		690		
		λ _d		640		Nm
Viewing Angle	I _F = 20mA	2θ 1/2		130		deg





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Fig 1. Forward Current vs. Forward Voltage

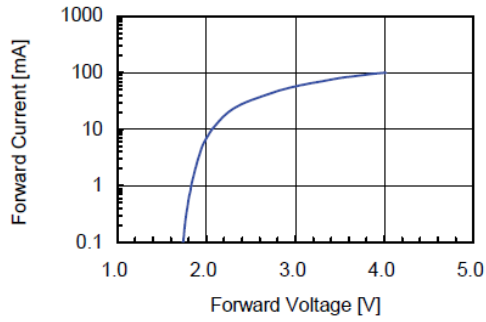


Fig 2. Relative Intensity vs. Forward Current

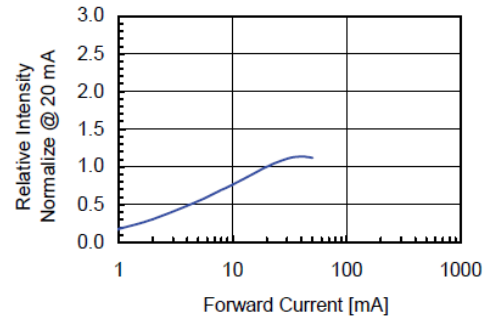


Fig 3. Forward Voltage vs. Temperature

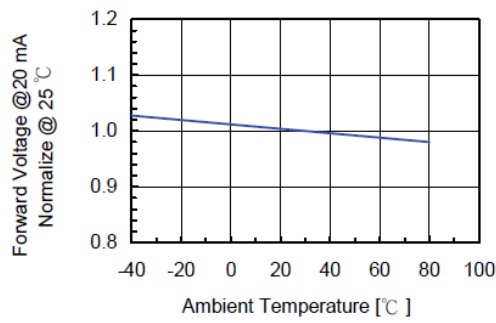


Fig 4. Relative Intensity vs. Temperature

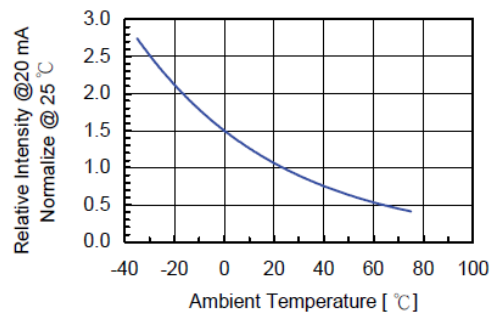
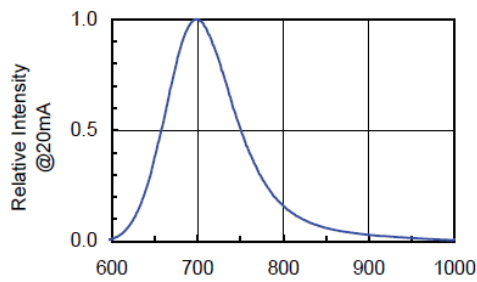


Fig 5. Relative Intensity vs. Wavelength





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•Soldering:

1. Manual of soldering

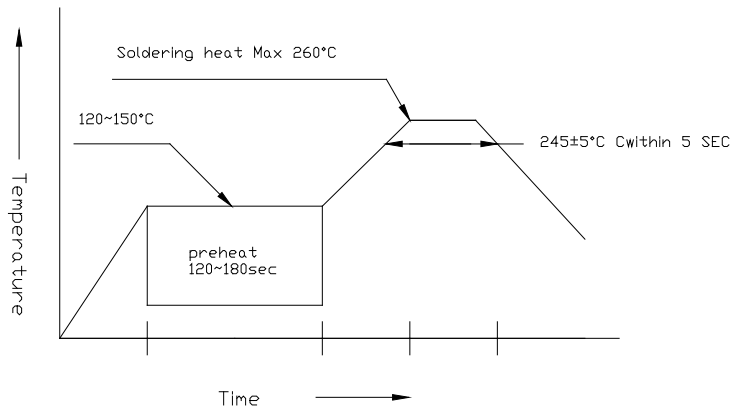
The temperature of the iron tip should not be higher than 260 °C and

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)

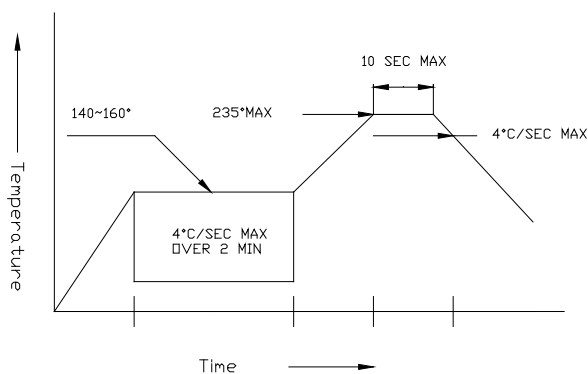


3. Reflow Soldering

Preheating: 140 °C ~ 160°C ± 5°C, within 2 minutes

Operation heating: 235 °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