

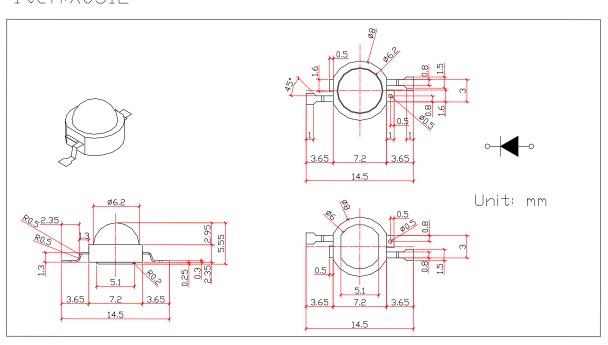
YETDA INDUSTRY LTD.

1W HIGH POWER LED (EMITTER-6) WW031E

Features	Applications					
* Long operating life	* Reading lights (car, bus, aircraft)					
* Highest flux	* LCD Backlights/light Guides					
* Available in White:2500K-25000K	* Fiber optic alternative/ Decorative Entertainment					
* Lambertian radiation pattern	* Mini-accent/Up lighters/Down lighters/ Orientation					
* More energy efficient than incandescent and most	* Indoor/Outdoor commercial and Residential					
halogen lamps	Architectural					
* Low voltage DC operated	* Cove/Under shelf/Task					
* Cool beam, safe to the touch	* Bollards/Security/Garden					
* Instant light (less than 100ns)	* Portable (flashlight, bicycle)					
* Fully dimmable	* Edge-lit signs (Exit, point of sale)					
* No UV	* Automotive Exit (Stop-Tail-Turn,CHMSL, Mirror					
	Side Repeat)					
* Superior ESD protection	* Traffic signaling / Beacons / Rail Crossing and					
	Wayside					
* Eutectic die bonding						
* RoHS compliant						

PACKAGE

Item:X031E





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Typical Optical/ Electrical Characteristics @TJ=25°C

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	VF	IF=350mA	2.80		4.0	V
Reverse Current	lr	VR=5v			50	uA
Viewing Angle	201/2	IF=350mA		60		deg
Luminous Intensity	φV	IF=350mA		150		lm
Recommend Forward Current	lf			350		mA
Chromaticity	Тс	IF=350mA	2800		3500	K
Thermal Resistance, Junction to	RJP	IF=350mA		10		°C/w
Case						_ / • •

Notes:

- 1. Tolerance of measurement of forward voltage±0.1V.
- 2. Tolerance of measurement of peak Wavelength±2.0nm.
- 3. Tolerance of measurement of luminous intensity±15%.

Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	lF	350	mA
Peak Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	1000	mW
Electrostatic discharge	Esd	±4500	V
Operation Temperature	Topr	-40~+80	°C
Storage Temperature	Тѕтс	-40~+100	°C
Lead Soldering Temperature*	Tsol	Max. 260 °C	C for 3sec M

^{*}IFP Conditions: Pulse Width≤10msec duty≤1/10

- * All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.
- * Re-flow, wave peak and soak- stannum soldering etc.is not suitable for this products.
- * Suggest to solder it by professional high power LED soldering machine.
- * Can use invariable-temperature searing-iron with soldering condition:≤260 degree less than 3 seconds.



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Typical Optical/Electrical Characteristics Curves

(TJ=25

°C Unless Otherwise Noted)

Fig 1. Relative Luminous FLux vs. Forward Current

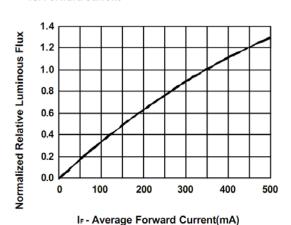
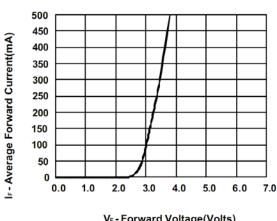
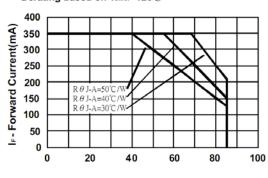


Fig 2. Forward Current vs. Forward Voltage



V_F - Forward Voltage(Volts)

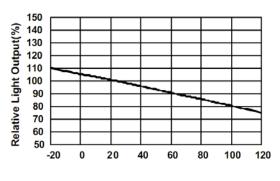
Fig 3. Maximum Forward Current vs. Ambient Temperature. Derating based on T_{JMAX}=120°C



T_A - Ambient Temperature (°C)

vs. Junction Temperature

Fig 4. Relative Light Output



Junction Temperature, T_i(°C)

Fig 5. Relative Spectral Power Distribution vs. Wavelength

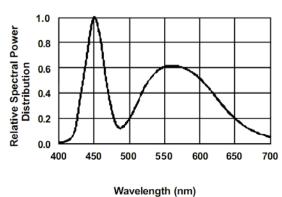
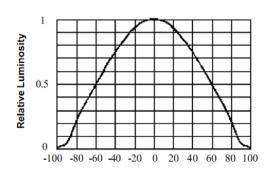


Fig 6. Relative Luminosity vs. Radiation Angle



Radiation Angle(Degrees)