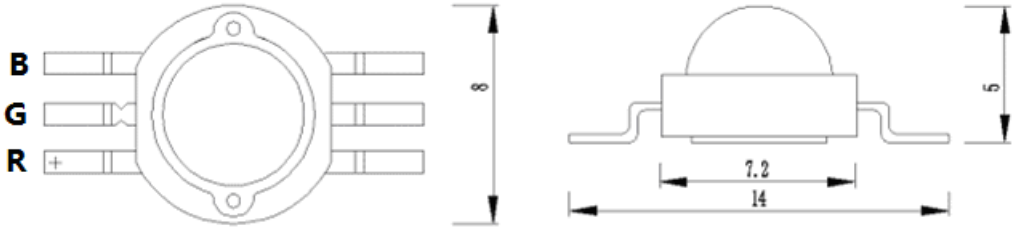
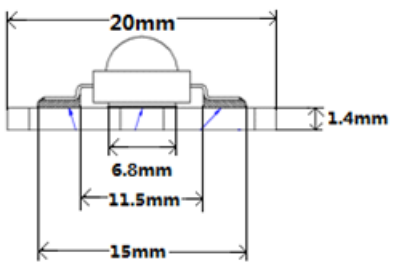
YETDA INDUSTRY LTD.

1W HIGH POWER LED (EMITTER)
RGB031E

Features	Applications
* Long operating life	* Reading lights (car, bus, aircraft)
* Highest flux	* LCD Backlights/light Guides
* RoHS compliant	* Fiber optic alternative/ Decorative Entertainment
* Lambertian radiation pattern	* Mini-accent/Up lighters/Down lighters/ Orientation
* More energy efficient than incandescent and most halogen lamps	* Indoor/Outdoor commercial and Residential 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	

PACKAGE





Notes: 1. All dimensions are in mm

2. Drawings are not to scale

YETDA INDUSTRY LTD.

Typical Optical/ Electrical Characteristics @TJ=25℃

Item	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=350mA	Red	2.0		2.4	V
			Green	3.0		3.6	V
			Blue	3.0		3.6	V
Viewing Angle	2θ1/2	I_F=350mA	RGB		140		deg
Luminous Intensity	φV	I_F=350mA	Red	35		40	lm
			Green	60		70	lm
			Blue	15		25	lm
Recommend Forward Current	I_F	--			350		mA
Thermal Resistance, Junction to Case	R_{JP}	I_F=350mA			15		℃/w

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	I_F	350	mA
Peak Forward Current*	I_{FP}	400	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	1000	mW
Electrostatic discharge	E_{SD}	±4500	V
Operation Temperature	T_{OPR}	-40~+80	℃
Storage Temperature	T_{STG}	-40~+100	℃
Lead Soldering Temperature*	T_{SOL}	Max. 260℃ for 3sec Max.	

*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.