DATA SHEET

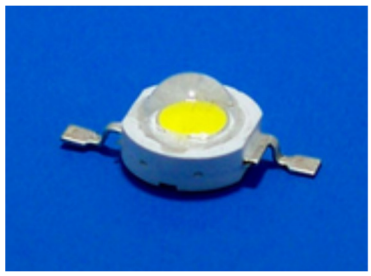
PART NO. : ZH-P008A(White)

REV : A / 0

Producer□_____ Auditor□_____ Approver□_____

CUSTOMER'S APPROVAL : _____ DCC : _____

• PACKAGE DIMENSIONS



Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.25mm (.020") unless otherwise noted.

• Features

- LONG OPERATING LIFE
- ENERGY EFFICIENT
- LOW VOLTAGE DC OPERATED
- INSTANT LIGHT (LESS THAN 100NS)
- NO UV EMISSION
- ROHS COMPLIANT

ZH-P008A(White)

- Chip Materials
  - Dice Material : InGaN
  - Light Color : Violet Light
  - Lens Color : Water Clear

- Electrical/Optical Characteristics (At TA=25℃)

Parameter	Symbol	Conditions	Min.	Avg.	Max.	Units
Luminous Flux	Φ	I_F=350mA	90		120	lm
Color Temperature	CCT	I_F=350mA	5000	--	6000	K
Forward Voltage	V_F	I_F=350mA	3.0	--	3.4	V
Thermal Resistance Junction To Board	$R\Theta_{J-B}$	I_F=350mA	– –	10	– –	℃/W
Reverse Current	I_R	V_R=5V	– –	– –	1	μA
Viewing Angle [1]	$2\Theta_{1/2}$	I_F=350mA	– –	120	– –	Deg

- Absolute Maximum Rating(At TA=25℃)

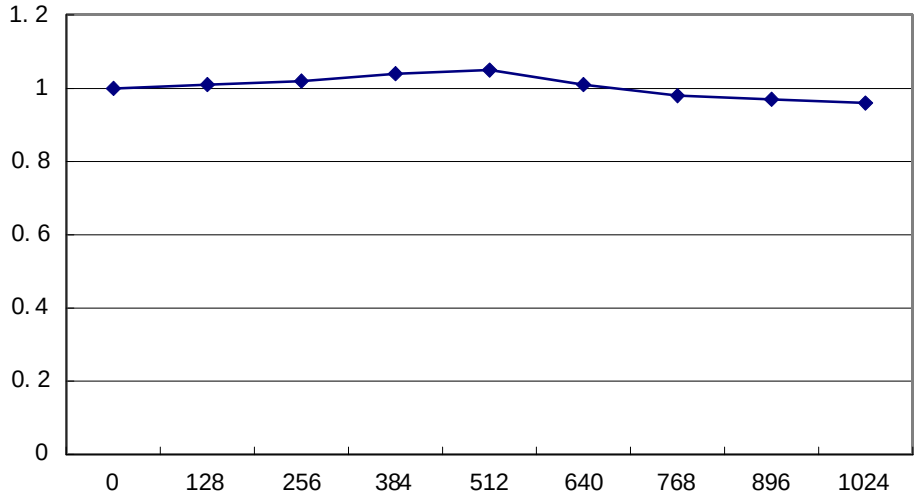
Parameter	Symbol	Ratings	Units
Power Dissipation	P_D	1	W
Continuous Forward Current	I_F	350	mA
LED Junction Temperature	T_J	105	℃
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-30℃ To +60℃	
Storage Temperature Range	T_{STG}	-40℃ To +100℃	
Manual Solding Temperature	T_{SOL}	350℃± 20℃ For 3~5 Seconds	
ESD Sensitivity	ESD	5000V HBM	

ZH-P008A(White)

- Room Temperature Operating Life Reliability Test Result

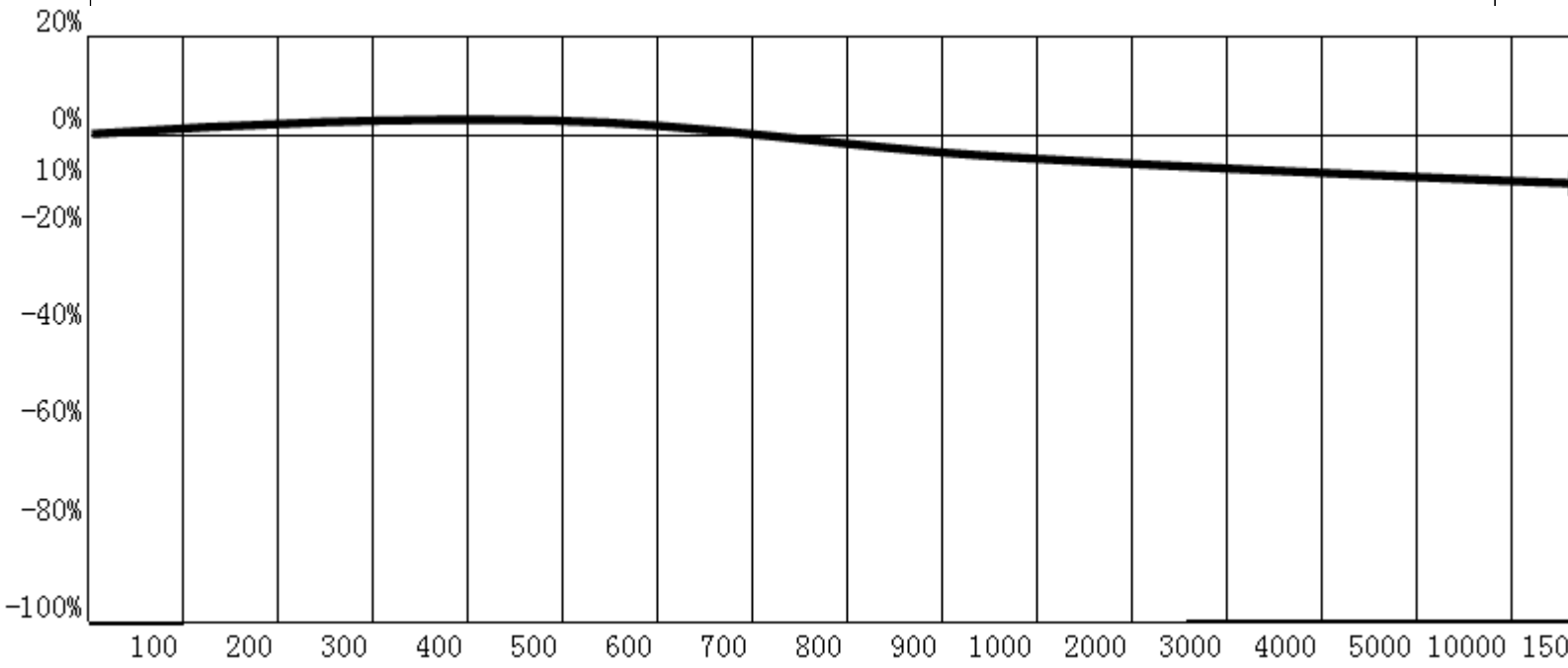
(Ta=25ºC,If=350mA)Use SSC circuit board&heat sink(Tj=50ºC)

2000HR 0.5□



degradation2000

- Life Time graph



20000HR 10□ degradation

High-Power LED

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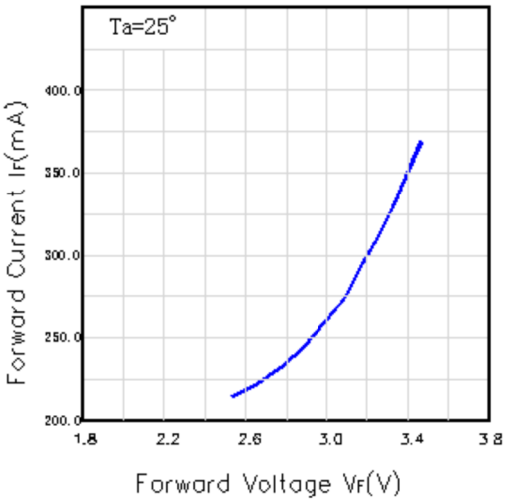
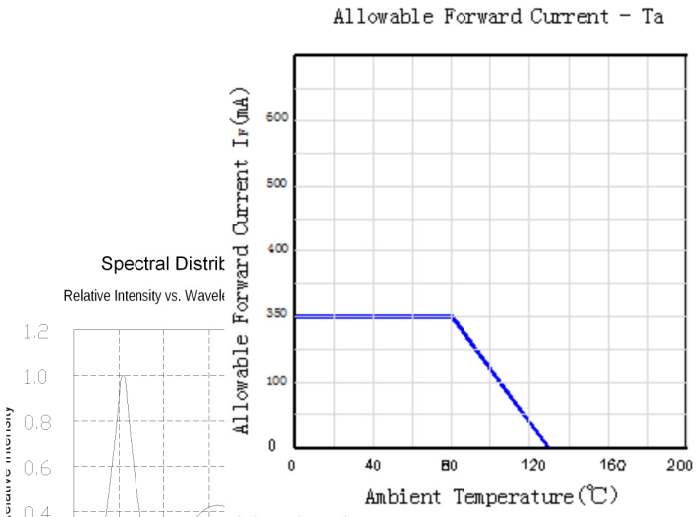
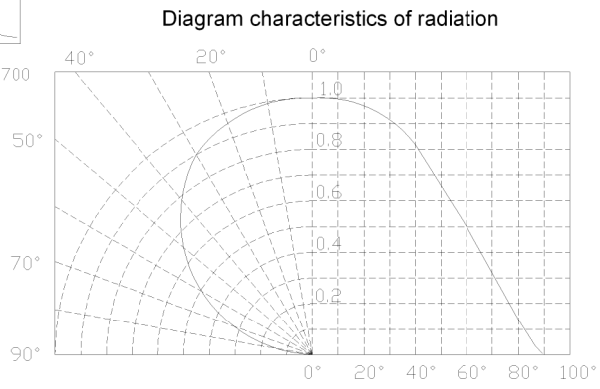
- **Spectrum Distribution**



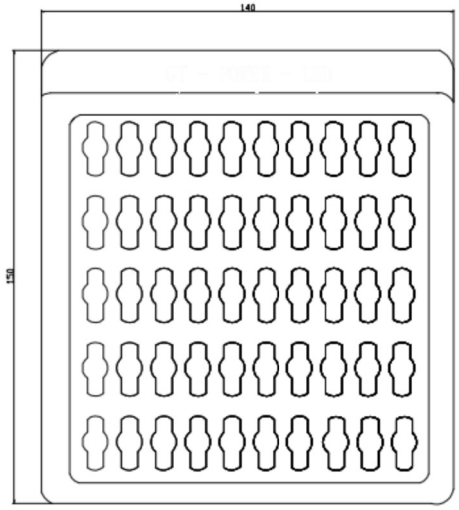
- **Radiation Diagram**

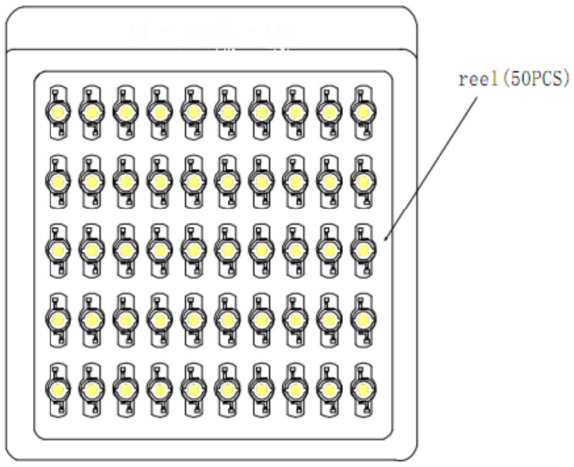




- **V_F-I_F Characteristics**

- **Packing standard**





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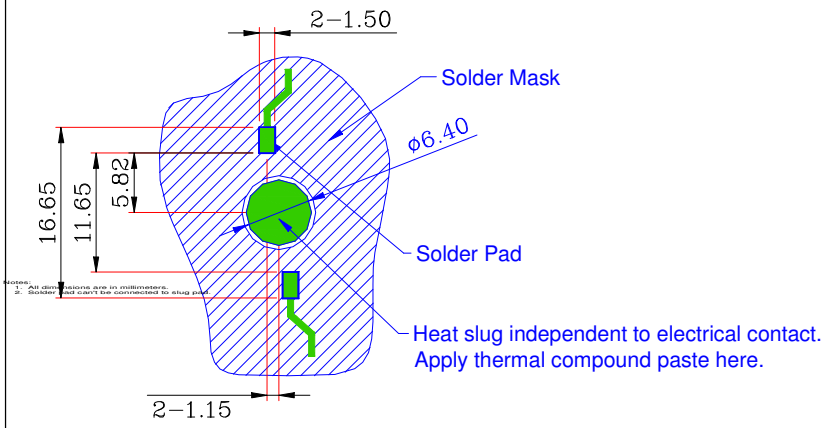
- Suggest Soldering Pad Dimensions

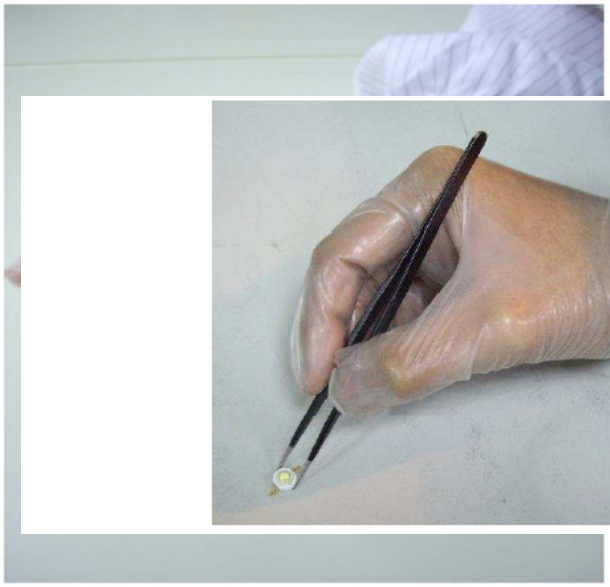


● Handing Notes

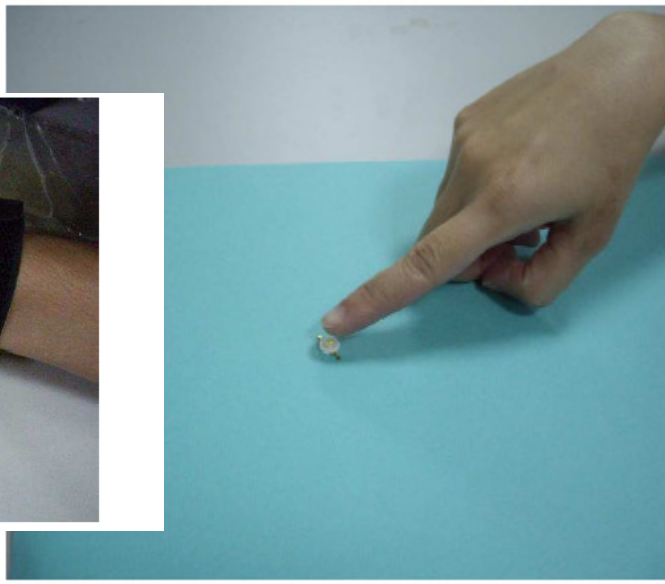
(1)Please do not press the lens

■ Soldering Note

(1) Please do not press the lens over 1.5kg.



Good



Impermissibility

Good **Not allowed**

(2)Please wear anti-static wrist strap and gloves to prevent ESD damage when handing.

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● Hing-Power Operating Note

1. High Power 350 series should be operated at 350 mA for ideal performance, but not more than 350mA.
2. High Power 350 series LED must be used in conjunction with heat-sinking devices. Soldering on Al PCB (Recommended PCB: □19.9mm 1.6t / two layers / 2.0 oz) with mid-connection point is another way to help heat dissipation. Thermal resistance for aluminum board must be less than 0.65 ℃/W.
3. High Power products are sensitive to static, especially in Blue, Cyan, Green□White, Warm White. Operators must wear static wristband (wireless static wristband is prohibited) and be well grounded while working in the environment with an ionizing air blower. Anti-static requirement should be under ESD 2000V.
4. High Power products are fully tested and shipped in anti-static packaging.
5. A non-conductive heat-dissipating paste should be applied between High Power and heat-sinking device.
6. It is recommended to use a resistor to limit current flow. In a parallel connection, each LED string should be protected individually.