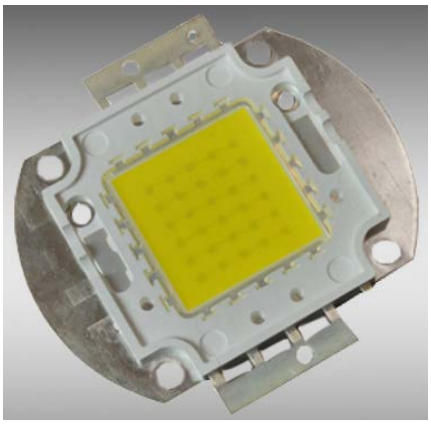
Specification for approval

MZ Series



CUSTOMER	
MODEL No.	EL-MZ550408
DESIGN No.	ELMZ0001-B45
EDITION	A2
DATE	2013.09.04

Description

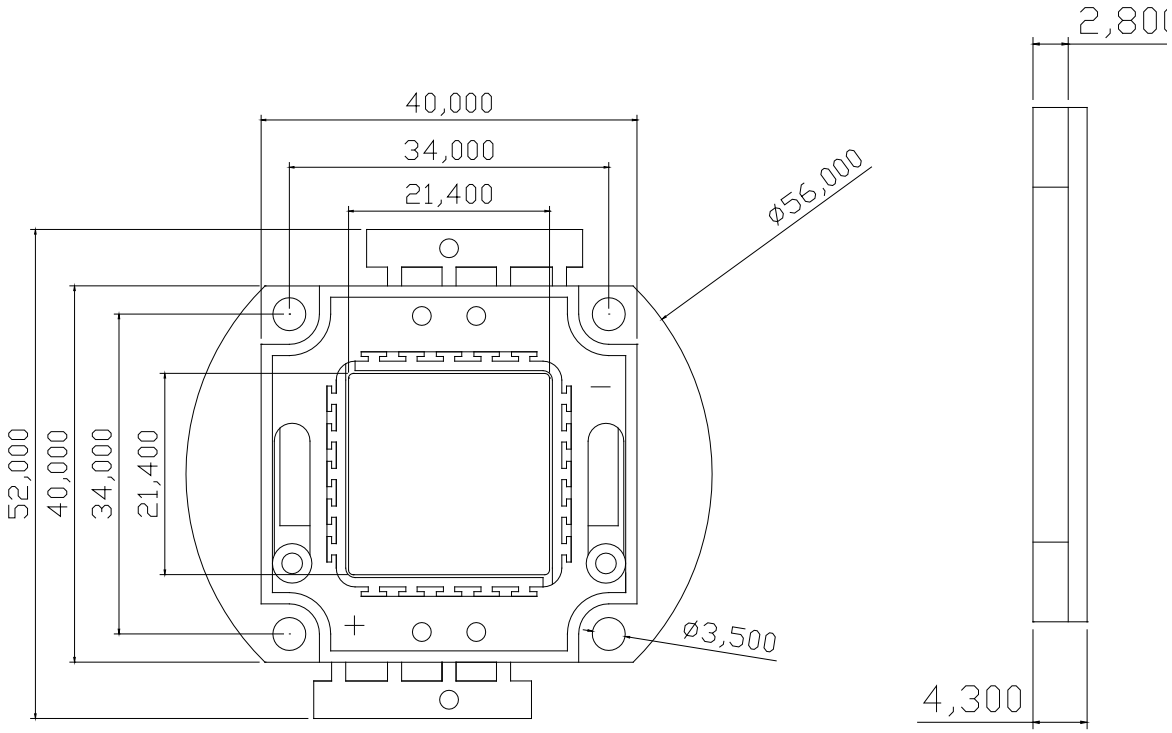
- ✧ For use in Architectural, Shop and Mining lamp
- ✧ For use in Advertising lighting,Floodlight and Street Lamps
- ✧ Optimum heat dissipation for instant use
- ✧ Design freedom thanks to compact dimensions
- ✧ Light color uniform and pure simple and easy to use
- ✧ High power and High luminous flux

Product features

- ✧ Half Angle ($2\Theta_{1/2}$):120°
- ✧ SMT Package
- ✧ High Power LED
- ✧ Multi chip parallel series

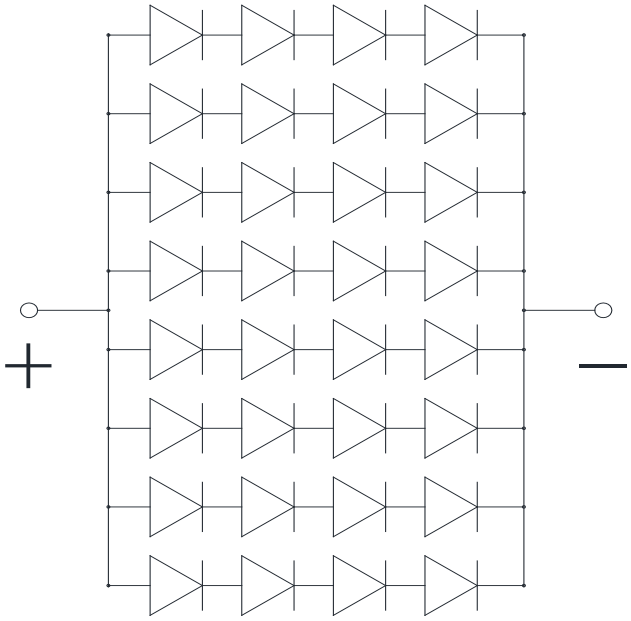
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES

Package Dimensions



Notes: 1.All dimensions are in millimeters. 2.Tolerance is ±0.25 unless otherwise noted

Equivalent circuit diagram



The voltage of each chip is range from 3.0v to 3.2v and e ach branch with maxium 350 mA current, so we can make t he design according the custo mer's requirement.

Electrical/Optical Characteristics (At T_A=25°C)

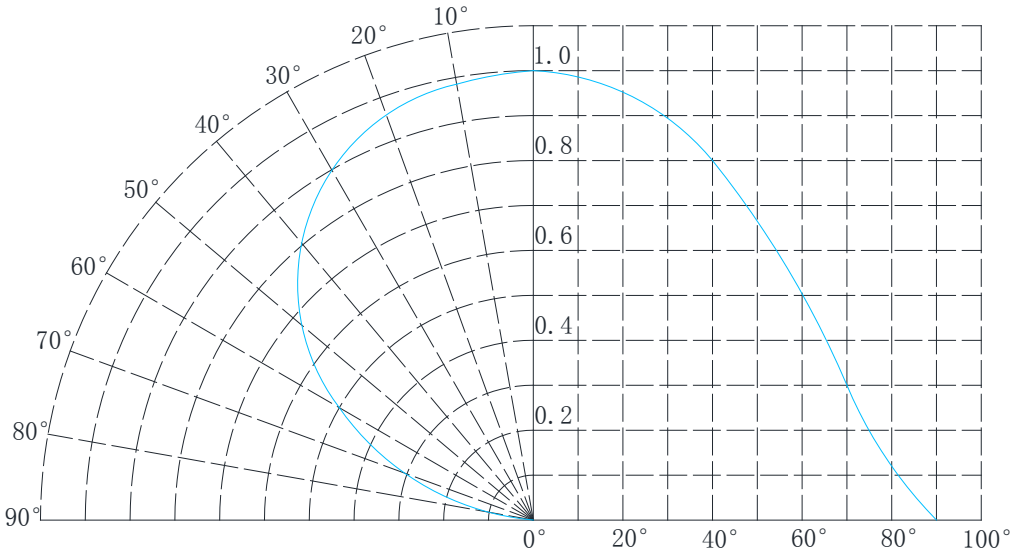
Parameter	Symbol	Conditions	Min.	Avg.	Max.	Units
Luminous Efficiency	Φ	I_F=2500mA	3000	– –	3500	Lm
Color Temperature/ Color coordinates	CCT	I_F=2500mA	5000	– –	5500	K
Forward Voltage	V_F	I_F=2500mA	12	– –	13	V
Thermal Resistance Junction To Board	$R\Theta_{J-B}$	I_F=2500mA	– –	0.5	– –	°C/W
Reverse Current	I_R	V_R=20V	– –	– –	10	μA
Viewing Angle [1]	$2\Theta_{1/2}$	I_F=2500mA	– –	120	– –	Deg

NOTE: (Tolerance: Iv ±10%, λ_d ±2nm, Vf ±0.05V)

Absolute maximum ratings

Parameter	Symbol	Ratings	Units
Power Dissipation	P_D	32	W
LED Junction Temperature	T_J	120	°C
Reverse Voltage	V_R	50	V
Operating Temperature Range	T_{OPR}	-20°C To +60°C	
Storage Temperature Range	T_{STG}	-40°C To +85°C	
Manual Solding Temperature	T_{SOL}	350°C± 20°C For 3~5 Seconds	
ESD Sensitivity	ESD	6000V □HBM	

Diagram characteristics of radiation



Precautions For use

(1) Storage

In order to aviod absorption of moisture it is recommended that the products are stored in the dry box (or dessicator) with a dessicant.Alternatively the following environment is recommended: Storage temperature :5°C~30°C Humidity:60% HR max.

(2) Any mechanical force or any excess vibration should be avoied during the cooling process after soldering.

(3) Solder paste or have banned welding flux splashed down silicon surface.

(4) Devices should not be used in any type of fluid such as water,oil,organic solvents etc. When cleaning is required,IPA should be used.

(5) Devices should be soldered within 7 days after opening the moisture-proof packing.

(6) ESD Precautions:Static Electricity and surge damages LEDs. It is recommended that wrist bands or anti-electrostatic gloves be used when handing the LEDs.All devices,equipment and machinery should be properly grounded.

(7) Note: the product use dc stablized power supply

(8) In order to prevente the dust and avoid the scaling powder spread into the surface of the led during soldering, there is blue film covered the led. Since the blue film can not bear high temperature, please remove it before you using it.

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