

Back Light LED Injection Module-Bee series

Characteristics



- Adopting SMD2835 as light source, with high purity aluminum PCB, better heat transfer;
- Al substrate for LED and components , with better heat dissipation;
- Secondary optic design, 120 degree visual angle, no light dots, good light uniformity;
- Best sealed, IP65 with moisture-proof, water-proof, dust-proof and impact resistance;
- Adopting PVC injection molding technology, with nice structure & design;
- All raw materials are in accordance with RoHS standards;
- Long lifespan > 20,000 hours with low failure rate.

Application

- Channel letter
- Metro sign
- Advertising light box
- Back light source

Description

MA663E is a new design of mid-power LED module. Adopting secondary optic design technology, high light transmittance Slimmer lens, 120 degree beam angle, greatly improve the light evenness on the surface;

Al substrate for LED and components , with better heat dissipation.

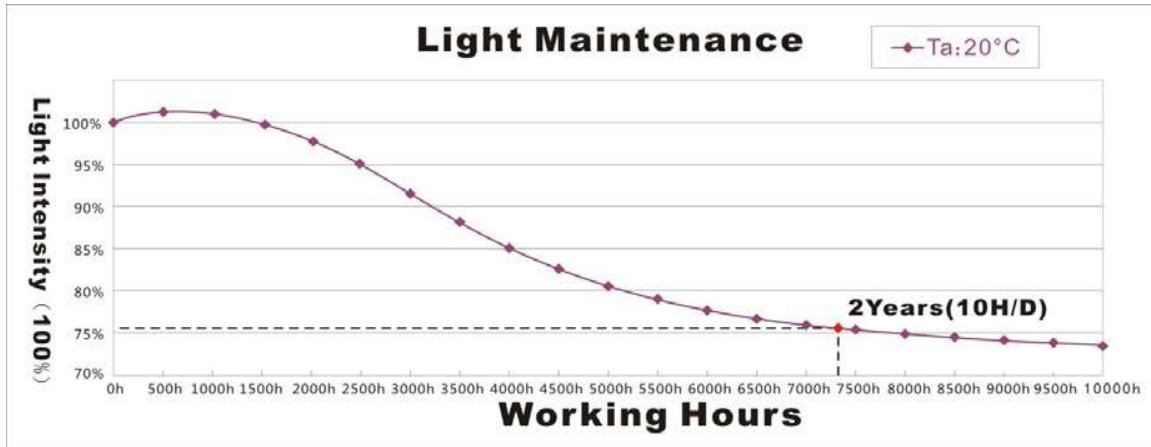
LED's working circuit is constant current, effectively prevent the unstable power supply effecting the LED lifespan.

With PVC injection technology, good protective property, nice structure and design. This product has our own patent of utility model and appearance.

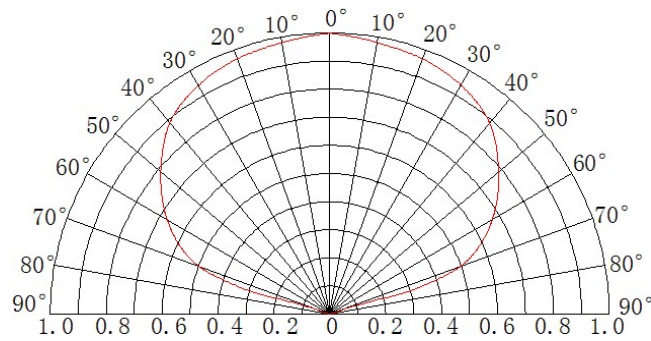
Parameters

Parameters (Room temperature =25□)						
Items	Parameter					Unit
LED type	SMD2835					
LED Quantity	3					PCS
Concatenation	50					PCS
Dimension	62*12*4.5					mm
Power	0.72±10%					W
Input V.	DC12					V
Input C.	0.06±10%					A
Surface Temp.	< 40					□
Drive Mode	. Constant Voltage					
Working Temp.	-25 ~ +45					□
Storage Temp.	-30 ~ +60					□
Protect Level	IP65					-
Optical and Electrical Parameters (Room temperature =25□)						
Test item	Condition	Symbol	Parameters			Unit
			Min.	Typical	Mix	
CCT	DC12V	CCT	10000	12000	15000	k
			5500	6000	6500	
			2800	3000	3200	
CRI	DC12V	CRI	70	75	80	--
Luminous Flux	DC12V@12000K	Φ	-	60	-	lm
	DC12V@6000K		-	65	-	
	C12V@3000K		-	62		
Visual Angle	DC12V	Wd	-	120	-	Deg

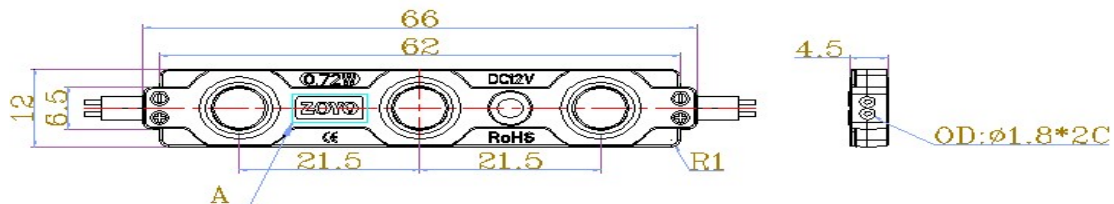
Light Attenuation Graph

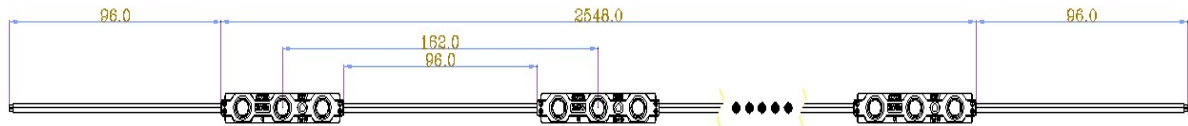


Light Distribution Curve



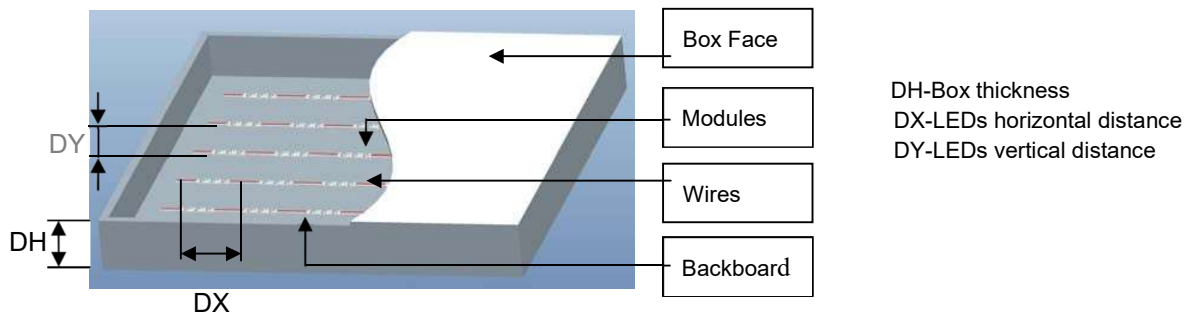
Product Sketch





Instructions

1. Modules Positioning (Vertical and Horizontal)



Item Code	Light box thickness DH (mm)	Module horizontal distance DX (mm)	Module vertical distance DY mm	Modules average in 1m ² (pcs/m ²)	Surface illumination (lux)
MA663E	100	162	70	120	950±10%

Remarks:

1.The panel is 3mm acrylic board with transmittance 60%

2. Installation

- First position the module with double sided tape onto the back of board, then fix with Silicon glue.
- Silicon glue directly fixing modules, but before installation, cleaning or polishing module surface.
- Screw mounting the modules on the board.

Packaging



1. each bunch of modules 50pcs, 4 bunches in 1 an anti-static bag, 1 bag 200pcs, 10 bags / carton,
2. TTL:2000pcs / carton
3. Carton size: 530mm*330mm*200mm,
4. Gross Weight: 14kg ($\pm 5\%$)
5. The said packaging is subject to the above drawing shown here. Please take this for reference.

Notice

1. The output of power supply should be matched with the module's working voltage as module doesn't have short circuit protection, overloading protection. So the selected power supply should be the short circuit protection and overloading protection functions.
2. The led module is apolar, two wire all white color
3. Max 50pcs in one bunch, better not more than this as it will cause lower brightness or danger. If need over 50pcs modules, suggesting connection first in series then parallels.
3. Power supply should be 20-30% more than the exact LEDs power, and wires should be a little bigger than the current which is needed.
4. Modules forbidden to be put into a inflammable substance, never be covered with a tight cover or onto the heat insulated sheet materials.
5. In case of installation or replacement, sure first to cut off power.
6. This type LED modules are not for dimmable function.
7. If there is something unusual (dark or flickering), pls check firstly power is right on or output voltage is correct. If all is right, pls change the module.
8. This modules are only used for light boxes, signs which have cover to protect modules, not used in outdoor or directly opening conditions.
9. Standard to: EN55015 EN61547 EN60598-1

This product manual is just for reference; please take the accurate characteristics the same as your tested results.

If this manual will be updated, there should be no extra notice.