

NOVA 1

MA301F

Back Light LED Injection Module-Tiger series



Characteristics

- Adopting SMD2835 as light source, with high purity aluminum PCB, better heat transfer;
- LED use customized 1 chips packaged, higher light efficiency;
- Constant current driver ensuring full bunch with consistent brightness and stably working;
- Al substrate for LED and components , with better heat dissipation;
- Secondary optic design, 160 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>35,000 hours with low failure rate.

Application

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

Description

MA301F is a new design based on MA823F, a mini version for small channel letter. 1 chips LED makes it with higher light efficiency. Adopting secondary optic design technology, high light transmittance PMMA lens, 160 degree wide 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.

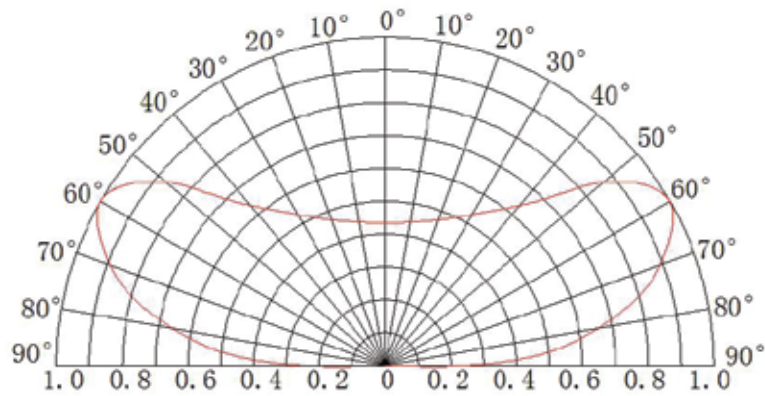
Parameter

Parameters (Room temperature =25℃)						
Item	Parameter			Unit		
LED Type	2835					
LED Quantity	1			PCS		
Concatenation	20			PCS		
Dimension	30*18*7.2			mm		
Module's Center Dis.	122			mm		
Power	0.72±10%			W		
Input Voltage	DC12			V		
Input Current	0.06±10%			A		
Driving mode	Constant Current					
Surface Temp.	< 40			℃		
Working Temp.	-20 ~ +45			℃		
Storage Temp.	-30 ~ +60			℃		
Protect Level	IP65			-		
Optical and Electrical Parameters (Room temperature=25℃)						
Test Item	Test condition	Symbol	Parameters			Unit
			Min.	Typical	Max.	
Color temperature	DC12V	CCT	10000	12000	15000	k
			5500	6000	6500	
			2800	3000	3200	
CRI	DC12V	CRI	70	75	80	--
Luminous Flux	DC12V@15000K	Φ	-	50	-	lm
	DC12V@6000K		-	62	-	
	DC12V@3000K		-	57	-	
Visual Angle	DC12V	Wd	-	160	-	Deg

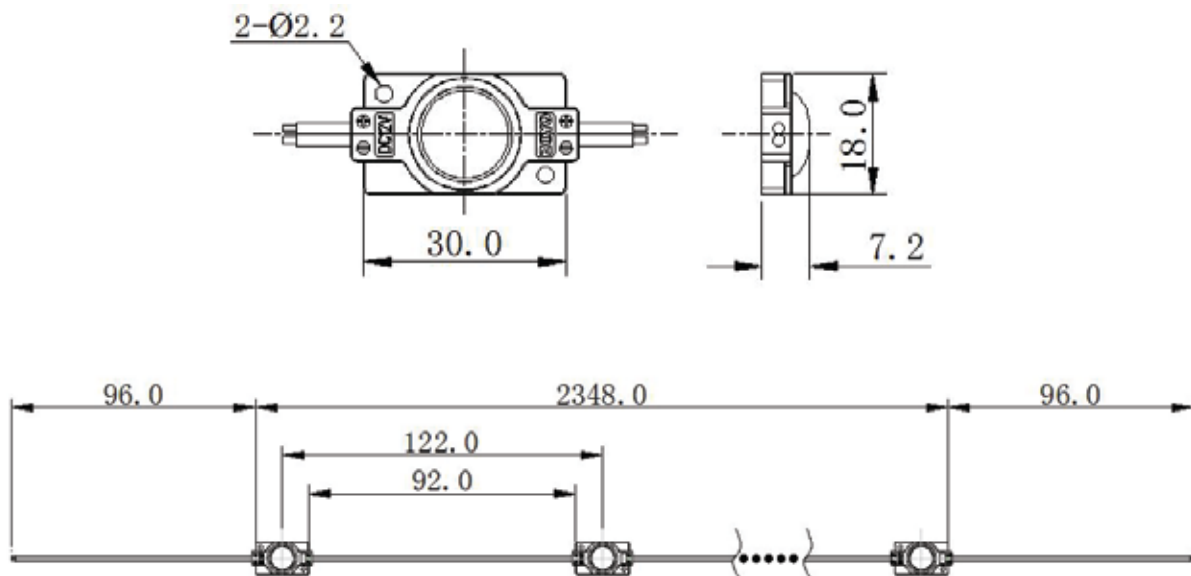
Light Attenuation Graph



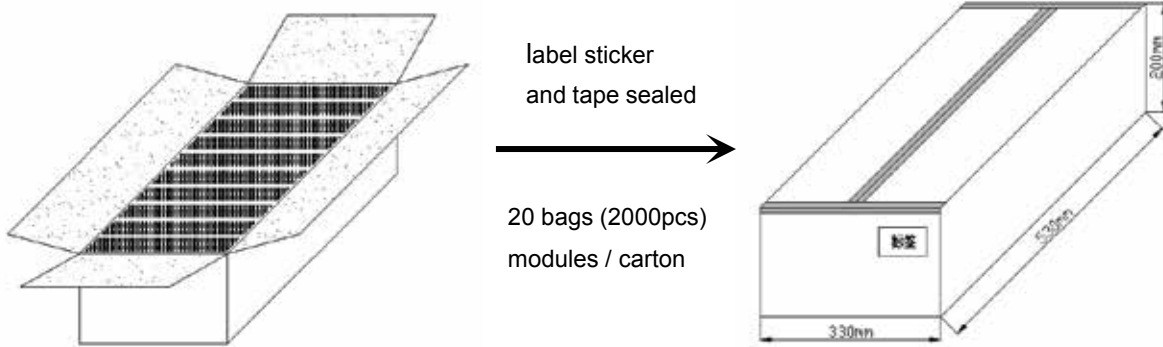
Light Distribution Curve



Product Sketch



Package Diagram



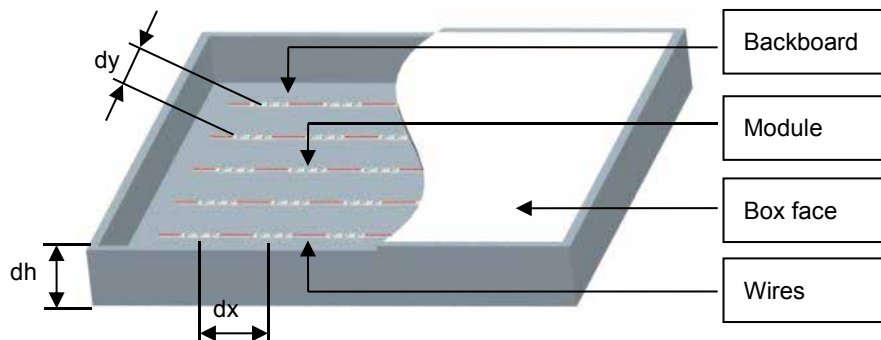
Carton Size (mm)	Qty/CTN (PCS)	Gross Weight (KG)	Net Weight (KG)
530*330*200	2000	13	12.2

Instruction

(1) Installation Method:

- A. -- Clean the fixation board and stabilize it.
 - Position the module with double sided tape and stick on the back of board.
 - Use silicon glue to fix modules (if needed).
- B. Left two $\Phi 2.5\text{mm}$ mounting holes, use screw $\Phi 2\text{mm} \times 10$ to fix it on board

(2) Modules Positioning (Vertical and Horizontal):



Item No.	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)
MA301F	80	100	80	120	1048
Remarks: 1.The panel is 3mm acrylic board, 60% transmittance.					