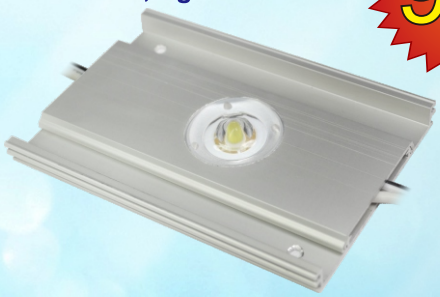
By AUSLED PTY LTD

ISO9001:2008 CERTIFIED

Power LED Module

- High power & ultra long life COB LED module for channel letter, light box

9W

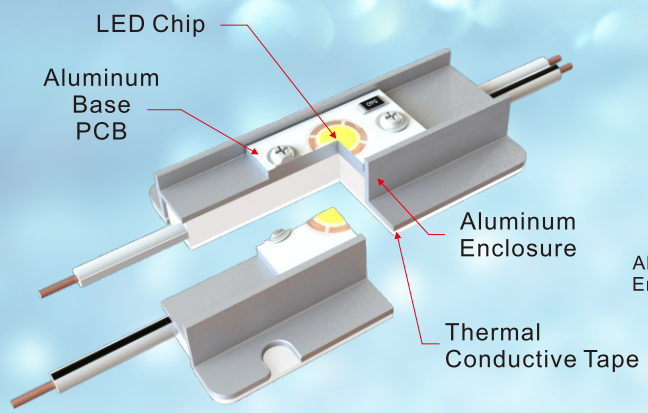


Features

- Using innovative, patent pending CooChip® technology, the LED chip is attached and bonded directly to the aluminum PCB and heat-sink, resulting in ultra low heat resistance. CooChip® RUNS COOL!
- Extended operating life at high ambient temperature, 75,000+ hrs @25℃ / 50,000+ hrs @40℃ for white LED modules.
- 178° wide angle, emits much softer, more even light compared to regular LED structure.
- Can be customized as light bar.
- Excellent for channel letter, cabinet lighting or any other back lighting application.

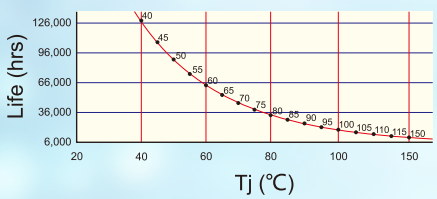
Heat Management

CooChip® Module LEDMJ-W



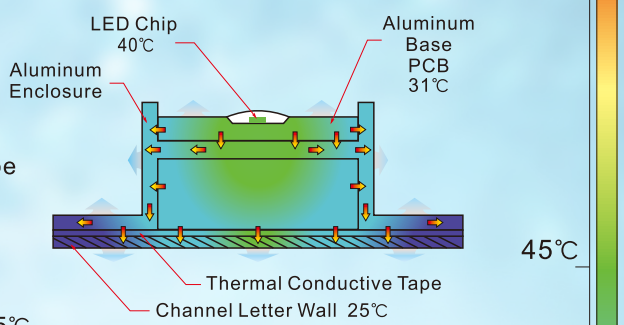
- The LED chip is bonded onto aluminum PCB embedded in aluminum enclosure. Heat directly transfers to the substantial heat-sink. In typical modules relying on tiny LED lamp legs to transfer the same amount of heat, the results are much higher thermal resistance and excessive chip temperatures of 100℃+.
- Thermal conductive tape further assists heat dissipation.

The illustration below demonstrates the relationship between life time and chip/junction temperature for typical LED chips. The lower the temperature, the longer the life. By using Coochip® technology, our LED modules have achieved the lowest possible chip temperature, thus prolonging its life even under high ambient temperatures.



Excellent
Last 75,000+ hrs

Cross Section Thermal Image

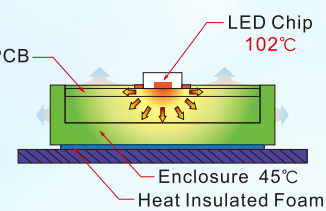


Ta = 25℃

VS.

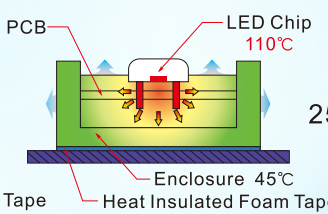
Legend
External Heat Flow
Internal Heat Flow

Typical Module
With White SMD LED



Inefficient
Last 15,000- hrs

Typical Module
With White Piranha LED

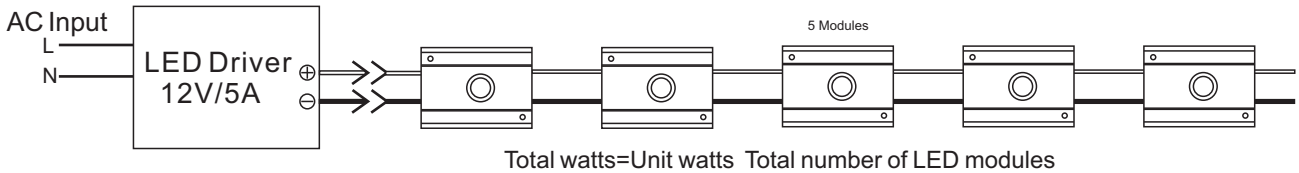


Extremely Inefficient
Last 10,000- hrs

Specifications

Color	Model No.	LEDs /Unit	Voltage	Unit Watts (Max.)	Viewing Angle	W. L. (nm)	Luminance (lm)	Life Time (hrs, Ta=25℃)	Modules /Chain	Chains /Pack
Cool White	LEDMD-W110C	1	12VDC	9W	180°	10000K	550	75,000	10	1

Wiring Diagram



Total watts=Unit watts Total number of LED modules
Recommended LED Driver wattage=Total watts 1.2

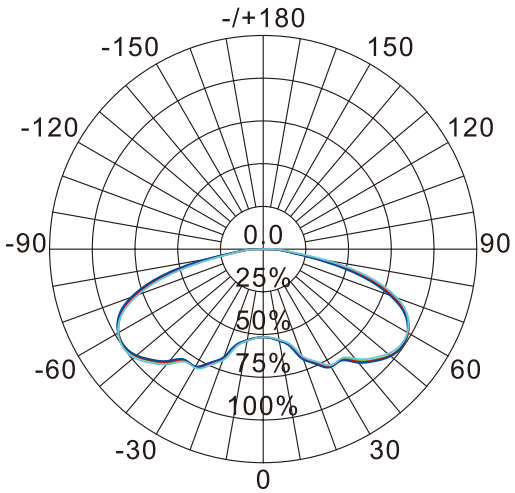
Note: In order to comply with UL class 2 requirements, connect no more than 5 modules in a row.

Radiation characteristics

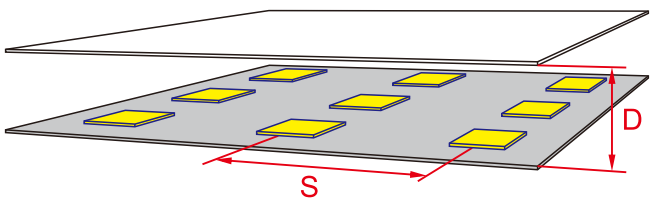
Average beam angle(50%) : 156.2°

Light intensity: Percentage

- C0/180, 156.4°
- C30/210, 156.6°
- C60/240, 156.2°
- C90/270, 155.8°



Module spacing calculation in light box(Size:L*W=1m*1m)



D: Light box depth S: Module spacing

D (inch)	4"	5"	6"	7"	8"
S max. (inch)	9"	11"	13"	15"	17"
D (mm)	100mm	120mm	150mm	180mm	200mm
S max. (mm)	220mm	260mm	330mm	400mm	440mm
Quantity min.	20pcs	15pcs	9pcs	6pcs	5pcs