



LED

GooLED

GooLED-LUM-4868 Pin Fin Heat Sink Φ 48mm for LumiLEDs

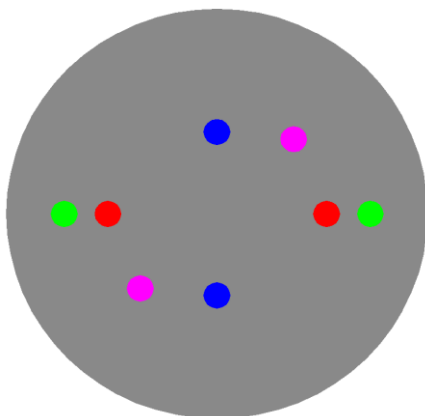
Features VS Benefits

- * The GooLED-LUM-4868 LumiLEDs Pin Fin LED Heat Sinks are specifically designed for luminaires using the LumiLEDs LED engines.
- * Mechanical compatibility with direct mounting of the LED engines to the LED cooler and thermal performance matching the lumen packages.
- * For spotlight and downlight designs from 600 to 1,800 lumen.
- * Thermal resistance range R_{th} 4.35°C/W.
- * Modular design with mounting holes foreseen for direct mounting of LumiLEDs COB series.
- * Diameter 48mm - standard height 68mm, Other heights on request.
- * Forged from highly conductive aluminum.



Zhaga LED engine and radiator assembly is a unified future international standardization

- * Below you find an overview of LumiLEDs COB's and LED modules which standard fit on the Pin Fin LED Heat Sinks.
- * In this way mechanical after work and related costs can be avoided, and lighting designers can standardize their designs on a limited number of LED Pin Fin LED Heat Sink.



LumiLEDs LED Modules directly Mounting Options

LumiLEDs COB series.

- LUXEON CoB 1202s: L2C5-xxxx1202E0600;
- LUXEON CoB 1202HD: L2C5-xxxx1202EH600;

With the Zhaga Book 11 holders for the red indicator marks.
 TE Connectivity Holder: 2213118-2;
 BJB Holder: 47.319.6180.50;
 Without the holders for the blue indicator marks.
 Direct mounting with machine screws M3x6.5mm.

LumiLEDs COB series.

- LUXEON CoB 1202: L2C5-xxxx1202E0900;
- LUXEON CoB 1203: L2C5-xxxx1203E0900;

With the Zhaga Book 3 holders for the green indicator marks.
 TE Connectivity Holder: 2213382-1;
 Without the holders for the pink indicator marks.
 Direct mounting with machine screws M3x6.5mm.

LuXEon CX Plus CoB series.

- LUXEON CoB M02: L2C4-xxxx-M02E0900;
- LUXEON CoB M03: L2C4-xxxx-M03E0900;

With the Zhaga Book 11 holders for the red indicator marks.
 BJB Holder: 47.319.6104.50;
 Direct mounting with machine screws M3x6.5mm.
 With the LEDiL products:
 Ronda series: FN15xxx-xx;

Mounting Options and Drawings & Dimensions

Example:GooLED-LUM-4868-B-1,2

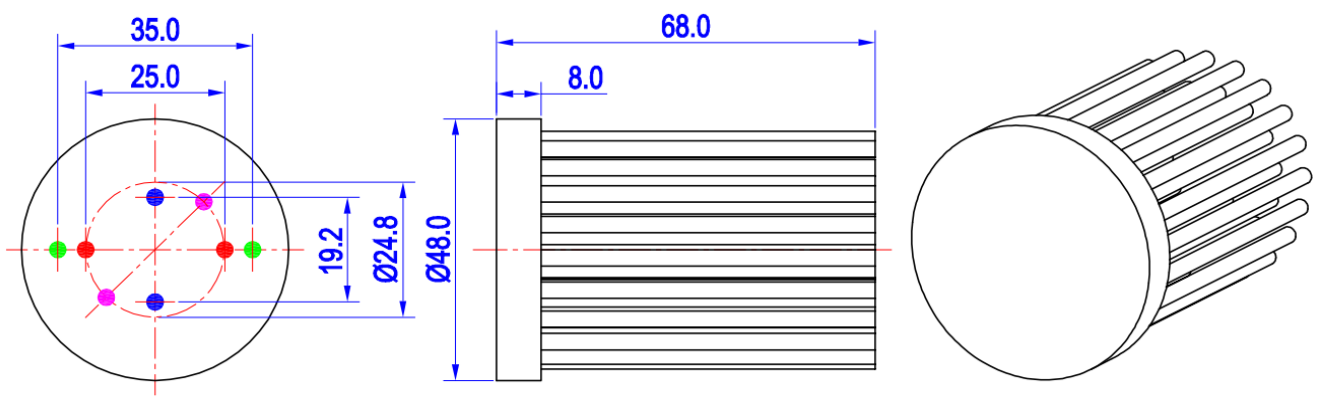
Example:GooLED-LUM-48 **1** - **2** - **3**

- 1** Height (mm)
- 2** Anodising Color
 - B-Black
 - C-Clear
 - Z-Custom
- 3** Mounting Options - see graphics for details Combinations available
 Ex.order code - 12
 means option 1 and 2 combined

Notes:

- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MingfaTech.
- MingfaTech reserves the right to change products or specifications without prior notice.

MOUNTING OPTION	Module type	Holder NO.	LEDiL products		THREAD	THREAD DEPTH	THREAD HOLE DISTANCE
			Ronda series	Olivia series			
1	LUXEON 1202s; LUXEON 1202HD;	/	FN15xxx-xx;	/	M3	6.5mm	19.2mm/ 2-@180°
2	LUXEON CoB M02; LUXEON CoB M03;	BJB Holder 47.319.6104.50			M3	6.5mm	25.0mm/ 2-@180°
	LUXEON 1202s; LUXEON 1202HD;	BJB Holder 47.319.6180.50 TE Holder 2213118-2					
3	LUXEON 1202;	/			M3	6.5mm	24.8mm/ 2-@180°
4	LUXEON 1202; LUXEON 1203;	TE Holder 2213382-1	M3	6.5mm	35.0mm/ 2-@180° (Zhaga Book 3)		





for


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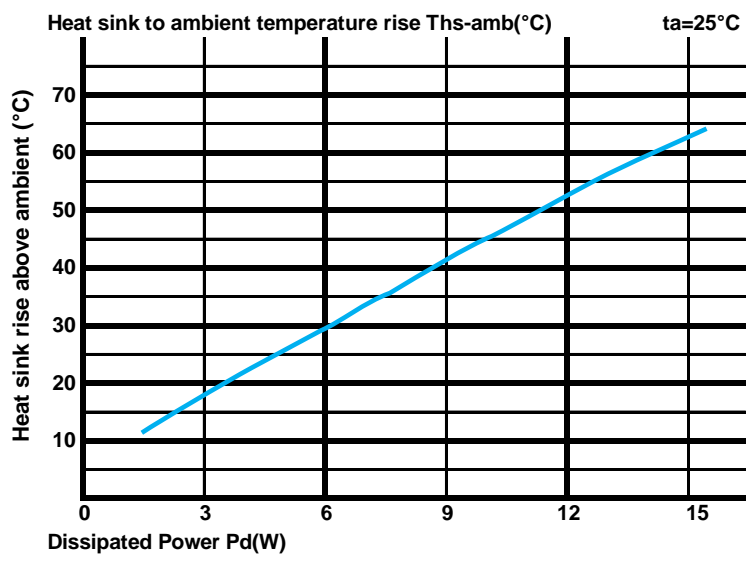
The product data table

	Model No.	GooLED-LUM-4868
	Heatsink Size	Φ48xH68mm
	Heatsink Material	AL1070
	Finish	Black Anodized
	Weight (g)	93.0
	Dissipated power (Ths-amb,50°C)	11.5 (W)
	Cooling surface area (mm²)	31383
	Thermal Resistance (Rhs-amb)	4.35 (°C/W)

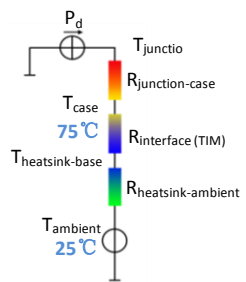
The thermal data table

* Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module.
 *To calculate the dissipated power please use the following formula: Pd = Pe x (1-ηL).
 Pd - Dissipated power ; Pe - Electrical power ; ηL = Light efficiency of the LED module;

Dissipated Power Pd(W)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)		Heat sink to ambient temperature rise Ths-amb (°C)	
	GooLED-LUM-4868			
3.0	6.00	18.0		
6.0	4.83	29.0		
9.0	4.56	41.0		
12.0	4.33	52.0		
15.0	4.13	62.0		



*The aluminum substrate side of the package outer shell is thermally connected to the heat sink via TIM (Thermal interface material).
 MingFa recommends the use of a high thermal conductive interface between the LED module and the LED cooler.
 Either thermal grease, A thermal pad or a phase change thermal pad thickness 0.1-0.15mm is recommended.



*Thermal resistance is a heat property and a measurement of a temperature difference by which an object or material resists a heat flow.
 Geometric shapes are different, the thermal resistance is different. Formula: $\theta = (Ths - Ta) / Pd$
 θ - Thermal Resistance [°C/W] ; Ths - Heatsink temperature ; Ta - Ambient temperature ;

*The thermal resistance between the junction section of the light-emitting diode and the aluminum substrate side of the package outer shell is R_{junction-case}, the thermal resistance of the TIM outside the package is R_{interface (TIM)} [°C/W], the thermal resistance with the heat sink is R_{heatsink-ambient} [°C/W], and the ambient temperature is Tambient [°C].

*Thermal resistances outside the package R_{interface (TIM)} and R_{heatsink-ambient} can be integrated into the thermal resistance R_{case-ambient} at this point. Thus, the following formula is also used:
 $T_{junction} = (R_{junction-case} + R_{case-ambient}) \cdot Pd + T_{ambient}$

