



for

LED



GooLED

GooLED-OSR-4868 Pin Fin Heat Sink Φ 48mm for Osram

Features VS Benefits

- * The GooLED-OSR-4868 Osram Pin Fin LED Heat Sinks are specifically designed for luminaires using the Osram 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 Rth 4.35°C/W.
- * Modular design with mounting holes foreseen for direct mounting of Osram LED engines.
- * Diameter 48.0mm - standard height 68.0mm, Other heights on request.
- * Forged from highly conductive aluminum.



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

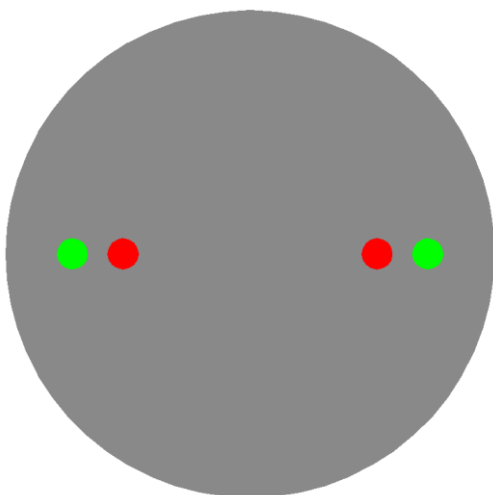
- * Below you find an overview of Osram COB's and LED modules which standard fit on the Pin Fin LED Heat Sinks.
- * In this way mechanical after work and related costs can be avoided, and lighting designers can standardize their designs on a limited number of LED Pin Fin LED Heat Sink.

OSRAM

Opto Semiconductors



LEDiL



Osram LED Modules directly Mounting Options

Osram SOLERIQ® S 13 COB LED modules name:

- GW KAGGxx.xx; GW KAGLxx.xx;
- GW KAGHxx.xx; GW KAGMxx.xx;
- GW KAGJxx.xx;

With the Zhaga Book 3 Holders:

BJB holder:47.319.2021.50;

TE LED Holder:2213254-1;

Direct mounting with machine screws M3x6.5mm, green indicator marks.

Osram SOLERIQ® S 9 COB LED modules name:

- GW KAFGxx.xx;
- GW KAFHxx.xx;
- GW KAFJxx.xx;

With the Zhaga Book 11 Holders:

BJB holder:47.319.6060.50;

TE LED Holder:2213678-5;

Direct mounting with machine screws M3x6.5mm, Red indicator marks.

With the LEDiL products:

Lenins series: CN14xxx; CN13xxx; CN12xxx;

Ronda series: FN15xxx-xx;

Osram PrevaLED Core Z5, Z6, Z7 L15 H1 and AC G2 LED modules name:

- PL-CORE-Z5 -1100-xxx; PL-CORE-G7 2000-xxx L15 H1;
- PL-CORE-Z5 -2000-xxx; PL-CORE AC -800-xxx;
- PL-CORE-Z6 -2000-xxx;

With the Zhaga Book 3 standard:

Direct mounting with machine screws M3x6.5mm, green indicator marks.

Osram PrevaLED Core Z6 Mini LED modules name:

- PL-CORE-Z6-MINI -2000-xxx;

With the Zhaga Book 11 standard:

Direct mounting with machine screws M3x6.5mm, Red indicator marks.



Mounting Options and Drawings & Dimensions

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

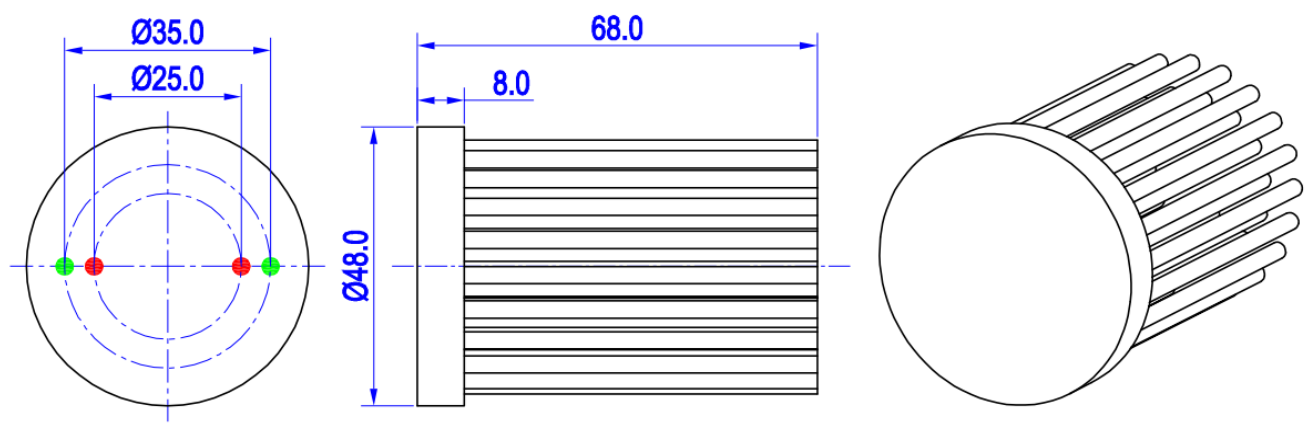
Example:GooLED-OSR-48 **1** - **2** - **3**

- 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
			Lenina series	Ronda series			
N	/	None	None	None	None	None	None
1	SOLERIQ® S 9	BJB Holder 47.319.6060.50	CN14xxx; CN13xxx; CN12xxx;	FN15xxx-xx	M3	6.5mm	25.0mm/ 2-@180° (Zhaga book 11)
	Z6 Mini	/					
2	Z5; Z6; Z7 L15 H1; AC G2	/	CN14xxx; CN13xxx; CN12xxx;	FN15xxx-xx	M3	6.5mm	35.0mm/ 2-@180° (Zhaga book 3)
	SOLERIQ® S 13	BJB Holder 47.319.2021.50					
		TE Holder 2213678-5					
		TE Holder 2213254-1					



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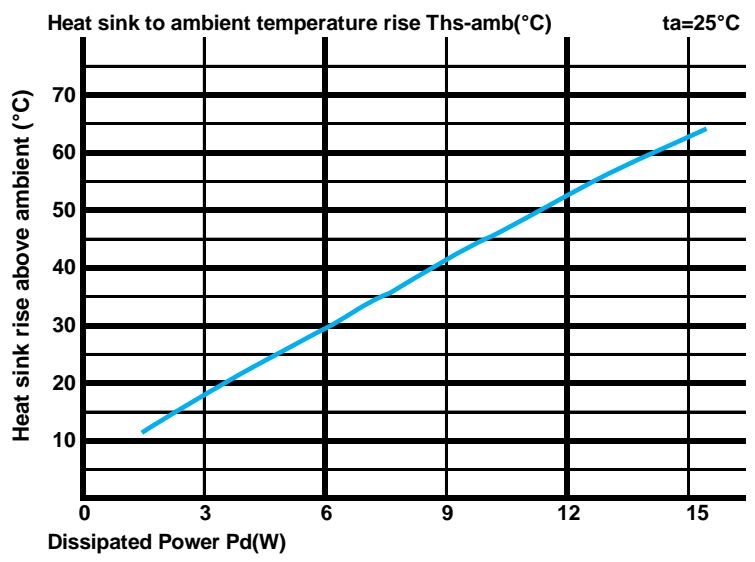
The product data table

	Model No.	GooLED-OSR-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)

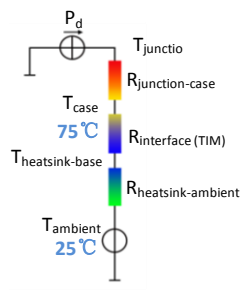
The thermal data table

* 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-OSR-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 $T_{ambient}$ [°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:
 $T_{junction} = (R_{junction-case} + R_{case-ambient}) \cdot Pd + T_{ambient}$