Mingfa TECH for LED

GooLED

GooLED-TRI-11080 Pin Fin Heat Sink Φ110mm for Tridonic

Features VS Benefits

* The GooLED-TRI-11080 Tridonic Pin Fin LED Heat Sinks are specifically designed for luminaires using the Tridonic 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 2,500 to 7,000 lumen.

* Thermal resistance range Rth 1.14°C/W.

* Modular design with mounting holes foreseen for direct mounting of Tridonic SLE series modules.

* Diameter 110.0mm - standard height 80.0mm, 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 Tridonic COB's and LED modules which standard fit on the Pin Fin LED Heat Sinks.

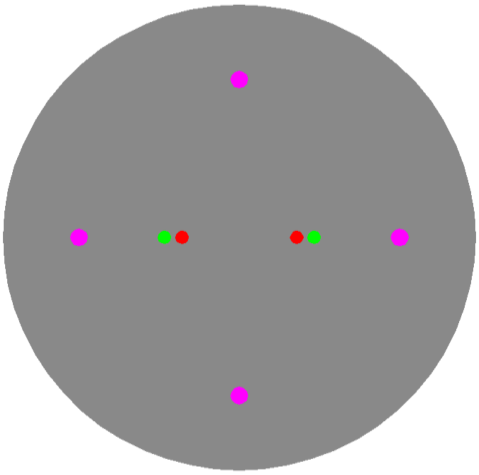
* In this way mechanical after work and related costs can be avoided, and lighting designers can standardize their designs on a limited number of LED Pin Fin LED Heat Sink.

TRIDONIC enlightening your ideas

BJB

A.A.G. STUCCHI ideas are made of light

LEDiL



Tridonic LED Modules directly Mounting Options.

Modules SLE EXCITE, FOOD, ART, FASHION Series.
Modules SLE ADVANCED, G6 ADV Series.

SLE G6 19mm 5000lm-xxx; | SLE G6 23mm 6000lm-xxx;

With the Zhaga Book 3 holders for the green indicator marks.
Direct mounting with machine screws M3x6.5mm.
With the LEDiL products:
Stella Series: FN13xxx-xx; FN14xxx-xx; FN15xxx-xx;
Stella Series mounting hole for the pink indicator marks

Modules SLE EXCITE, FASHION, TINGE series.
Modules SLE ADVANCED, G5 XD ADV and G6 ADV Series.
Modules SLE ESSENCE, G6 SNC Series.

SLE G6 15mm 3000lm-xxx; | SLE G6 17mm 4000lm-xxx;

With the Zhaga Book 3 holders for the green indicator marks.
BJB holder: 47.319.2021.50; AAG.STUCCHI: 8101-G2
Without the holders for the red indicator marks.
Direct mounting with machine screws M3x6.5mm.

With the LEDiL products:
Stella Series: FN13xxx-xx; FN14xxx-xx; FN15xxx-xx;
Stella Series mounting hole for the pink indicator marks
Ronda series: FN15xxx-xx;

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Mounting Options and Drawings & Dimensions

Example:GooLED-TRI-11080-B-1,2

Example:GooLED-TRI-110 1 - 2 - 3

1 Height (mm)

2 Anodising Color

B-Black

C-Clear

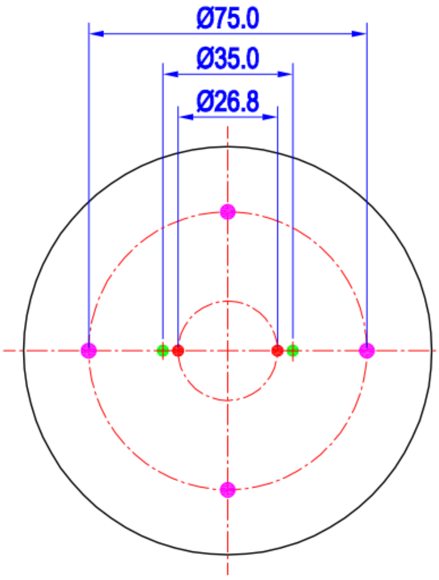
Z-Custom

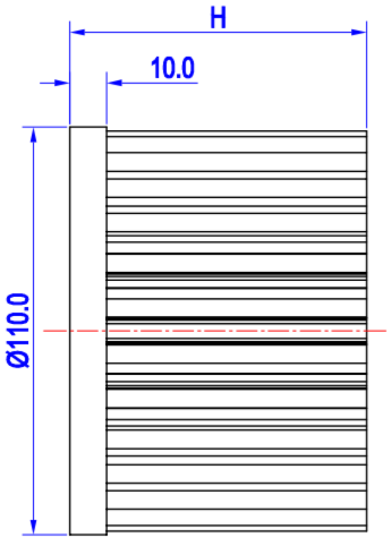
3 Mounting Options - see graphics for details Combinations available Ex.order code - 12 means option 1 and 2 combined

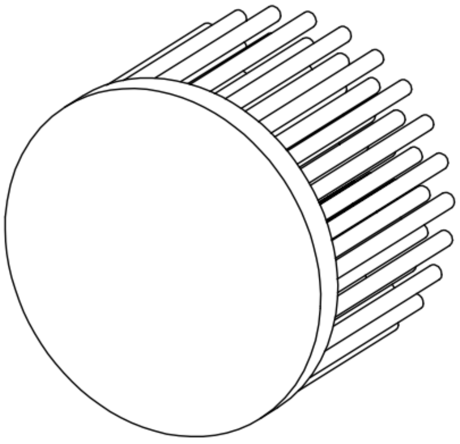
Notes:

- 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 Stella Series	 Ronda series	THREAD	THREAD DEPTH	THREAD HOLE DISTANCE
1	SLE G6 15mm; SLE G6 17mm;	/	FN13xxx-xx; FN14xxx-xx; FN15xxx-xx;	FN15xxx-xx;	M3	6.5mm	26.8mm/ 2-@180°
2		BJB Holder 47.319.2021.50			M3	6.5mm	35.0mm/ 2-@180° (Zhaga book 3)
		AAG.STUCCHI 8101-G2					
	SLE G6 19mm; SLE G6 23mm;	/		/			
3	LEDiL Lens	/	Stella Series	/	M4	8.5mm	75.0mm/ 4-@90°







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The product deta table

GooLED 	**Model No.**	**GooLED-TRI-11080**
	Heatsink Size	**Φ110xH80mm**
	Heatsink Material	**AL1070**
	Finish	**Black Anodized**
	Weight (g)	**617.0**
	Dissipated power (Ths-amb,50℃)	**44.0** (W)
	Cooling surface area (mm²)	**129119**
	Thermal Resistance (Rhs-amb)	**1.14** (°C/W)

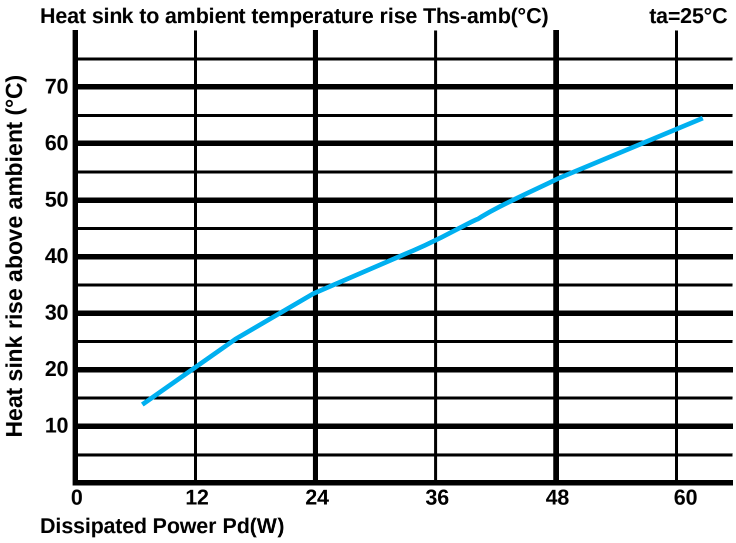
The thermal data table

* Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module.

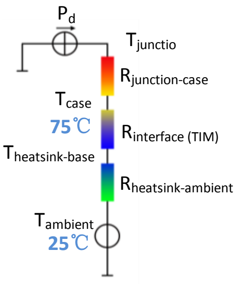
*To calculate the dissipated power please use the following formula: Pd = Pe x (1-ηL).

Pd - Dissipated power ; Pe - Electrical power ; ηL = Light effciency of the LED module;

Pd = Pe x (1-ηL)		Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
		GooLED-TRI-11080	
Dissipated Power Pd(W)	12.0	1.67	20.0
	24.0	1.38	33.0
	36.0	1.17	42.0
	48.0	1.10	53.0
	60.0	1.03	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: θ =(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:

$T_{junction}=(R_{junction-case}+R_{case-ambient})\cdot Pd+T_{ambient}$