Cooling House Aluminum heat spreader



Ver.1

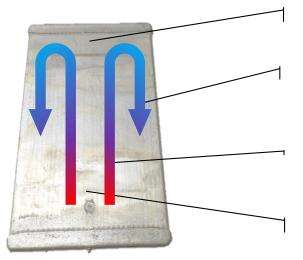
About Aluminum heat spreader



The heat spreader is a closed-loop 2 phase flow device with an enormous heat spreading capacity.

Below the picture shows it's working principle, this phase change heat transfer device can move tremendous thermal power away from the heat source. With microchannels inside, the heat exchange area is maximized and the working fluid flow is regulated, working fluid boils and generates a pressure difference, which forces the vapor and heat to the condensation zone, gas is then condensed and returned to the evaporation area as a completed cycle.

The Aluminum heat spreader is sealed by automobile industrial process, reliable, and predictable in its behavior, mostly it functions with gravity, with customized design our solution functions as well horizontally.



Condensation area

Liquid returns to evaporation area by pressure difference and gravity force

Pressure difference forces vapor toward the condensation zone

Evaporation zone designed to absorb high heat flux



Advantages over traditional heat pipes

- Flat form factor offers tremendous more contact surface
- Micro channels structure for better heat exchange efficiency and mechanical strength
- Extremely high Q-max
- Suitable for display and EV battery pack cooling solution

	Width (mm)	Thickness (mm)	Length (mm)
CH-HSP1	41	5	100~1,800
CH-HSP2	67	5	100~1,800
CH-HSP3	66.5	2.5	100~1,800
CH-HSP4	90	5	100~1,800
CH-HSP5	125	5.5	100~1,800

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