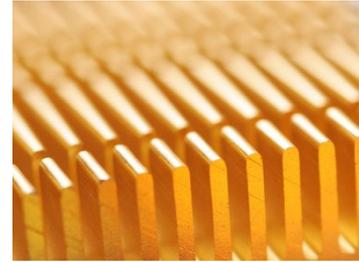


Dissipation of Electronic Component Waste Heat Via Heatsinks

When it comes to keeping electronic components cool heatsinks are a must. Electronic designers have to increasingly rely on heatsinks as, CPUs for example, continue to increase in power and therefore have more heat to dissipate. Further compounding the heat dissipation issue is the need for miniaturisation. The task of the heatsink in removing heat at a rate suitable to keep the electronic component from overheating is becoming more and more difficult. There was a time when simple finned heatsinks would be adequate but as CPUs have grown in size and power and thus emitted more heat the simple finned heatsink can no longer cope despite increasing the finned surface area.



Temperature Difference

Electronic components have to work within a permissible temperature range and so at the higher end, where ambient temperatures can be uncomfortably high, removing heat becomes more of a challenge. Heatsinks rely on temperature difference and so the higher the ambient air temperature the less difference there is to produce a significant heat flow away from the heatsink and therefore the electronic component. Adding to local temperature within the unit enclosure are other components also trying to dissipate their own excess heat and so it is also necessary to forcibly extract heat from the enclosure and provide cooler air.

Reliability and Life Expectancy

Additionally the performance, reliability and life expectancy of electronic components are inversely related to the component temperature. For example an increase in the component temperature corresponds to an exponential decrease in its reliability, performance and life expectancy. It is, therefore, important to effectively control the component operating temperature within the limits set by the design engineers to ensure long life and reliable performance.

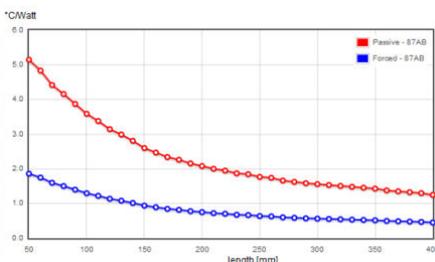


Forced Cooling

Attaching a fan to the heatsink will significantly improve its performance and thus the component it is cooling. Electronic designers are obviously aware of this and so a fan is incorporated to allow the component to operate at higher performance and temperature without loss of reliability or life expectancy.

ABL Heatsinks

ABL can supply a wide range of heatsinks including bespoke design and post processing to bring the heatsink to near or finished state. Their interactive performance graph allows designers not only to determine the size and type of heatsink they need but also compare the performance of two heatsinks simultaneously.



ABL Heatsinks have worked with many clients to provide tailored solutions to their requirement for aluminium heatsinks in the electronics sector. ABL's ability to offer a one stop shop solution provides a unique service for their customer base, located both in the UK and around the world.

Their experience in this sector, aligned with the capabilities and equipment they have in-house, make ABL the ideal partner for all your needs in the electronics equipment market.

Contact ABL today to learn more about how they can assist you in the heatsinks market.

Tel:+(0)44 121 789 8686 or visit their website at <http://www.ablcomponents.co.uk/contact.htm>