Assignment – II

TASK – I

Explore heat sinks with various fin designs to calculate the resistances in a heat sink model. Explain and show the understanding of the term "**Sink ambient resistance – R_{sa}"** From the figure-1 explain various heat transfer phenomenon in heat sinks. (Use literature and explain R_{bf}, R_{sp} and R_{fa})

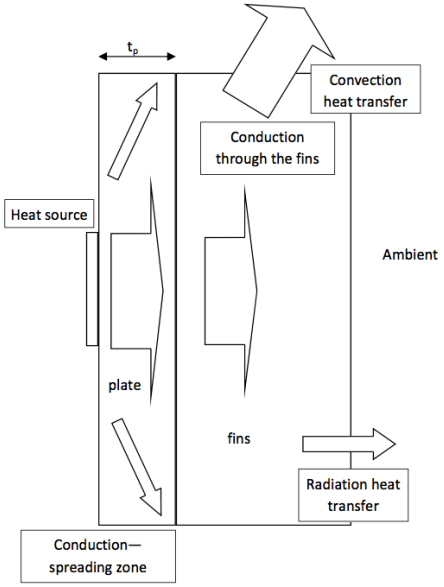
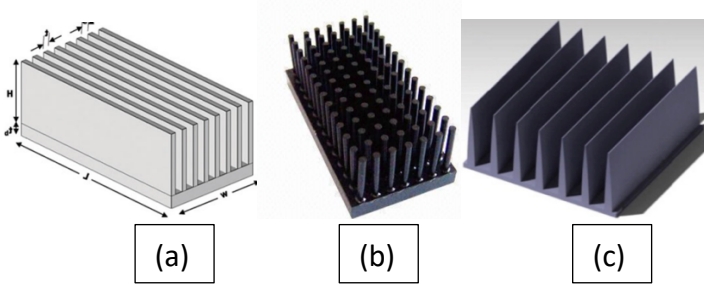


Figure. 1 – Heat sink common fluxes

TASK – II

Explain the efficiency of the following fin designs for the heat sinks.

- Rectangular (a)
- Pin fin(b)
- Triangular fin(c)



(a) (b) (c)

Report

A comprehensive report on the topic should be submitted including the references for the information or figures used, no later than the deadline. Report should be presented in either PDF or Docx format. And a following presentation should be prepared for the seminar **10-15 minutes max**.

Literature

As a starting point for the assignment please see the reference literature given on the moodle course page under Theory section in Module-II. Please note that the assignments don't have to be limited to the reference literature, search for the scientific articles and other sources as well.

*Extra points will be awarded if you can demonstrate your findings using COMSOL.