

Chapter 12

Thermal Flows in a PCB from Aluminum with Alumina Oxide Generated by a Linear Heat Source

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Abstract: The paper presents the results of study heat fluxes in a plate made of aluminum with nanoporous aluminum oxide generated by a linear heat source. A carbon filament was used as heating element. It was established that the heat distribution had the form of a heat pipe cone. This effect leads to a decrease in thermal resistance of the printed circuit board.

Key words: Nanoporous aluminum oxide, thermal fluxes, thermogram.

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