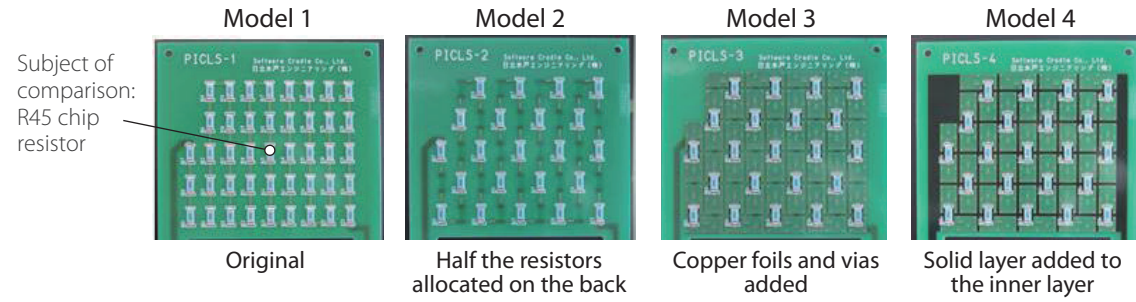


Changing Printed Board Layout to Lower Device Temperature: Prediction and Measurements

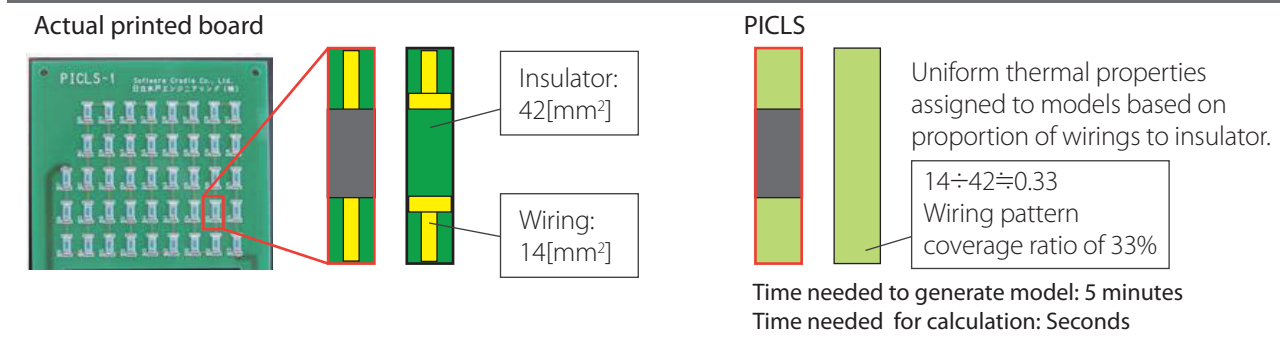
Using PICLS to perform thermal analyses and predict temperatures of chip resistors

Thermal Analyses of Printed Boards

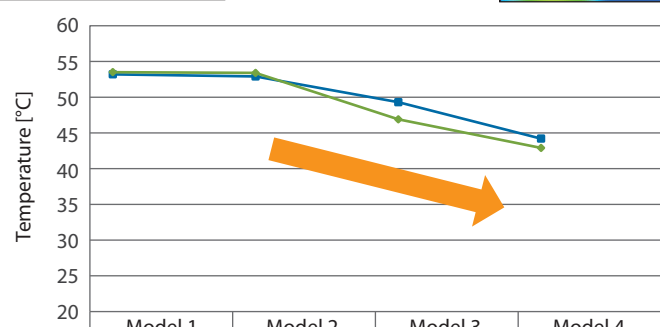
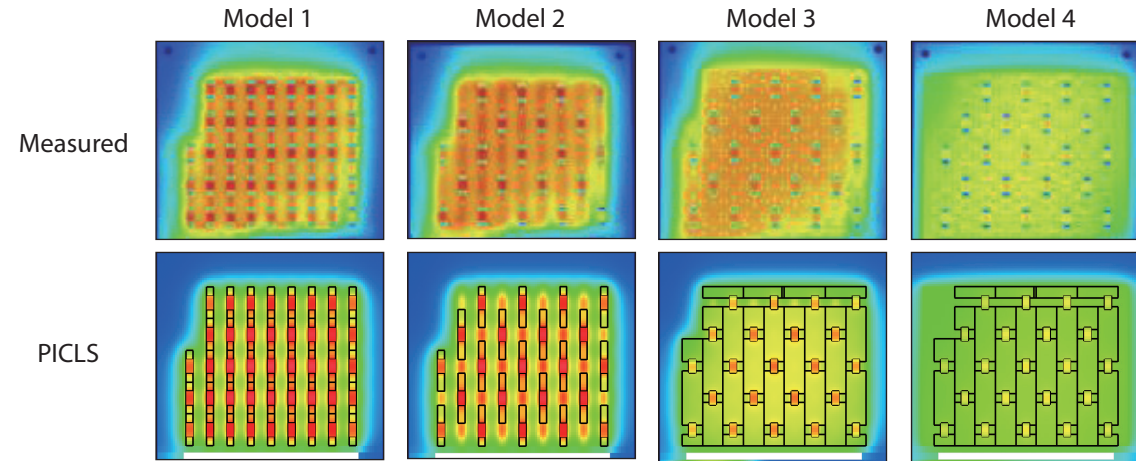
Analysis targets



Modeling



Analysis results



Notes

The R45 chip resistor temperatures are shown in the graph for the four models. Both measurement and analysis results show decreasing temperatures proceeding from Model 1 to 4. PICLS can be used to identify temperature trends for different model layouts and features.

PICLS can be used during conceptual design, to quickly evaluate the effects of electronic component allocation and thermal vias on printed circuit board device temperatures.