Thermal Resistance Modeling Report

Two-Resistor Model: BD357xYFP-M Series

This application note provides the information needed to create a two-resistor model for thermal simulation of high withstand voltage LDO Regulator IC BD357xYFP-M Series. The thermal simulations mentioned here cover three-dimensional thermal conduction and thermal fluid analysis tools.

Product Summary

Model name: BD3572YFP-M BD3573YFP-M
BD3574YFP-M BD3575YFP-M

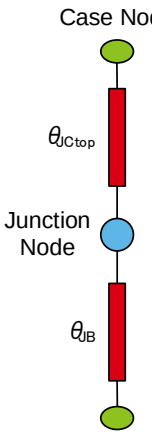
Package name: TO252-5

Function: high withstand voltage LDO Regulator IC

See Datasheet for more details.

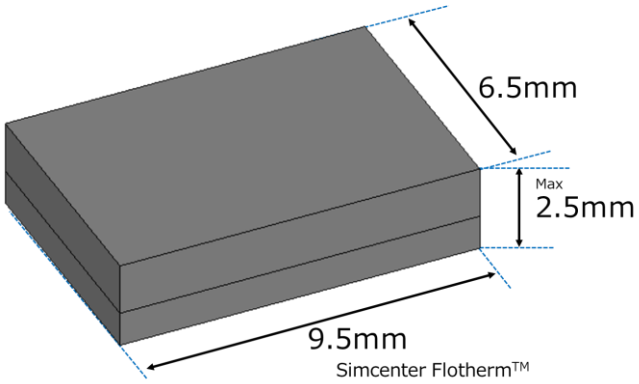
Thermal Resistance

Element	Value
θ_{JCtop}	44.1 [°C/W]
θ_{JB}	3.8 [°C/W]

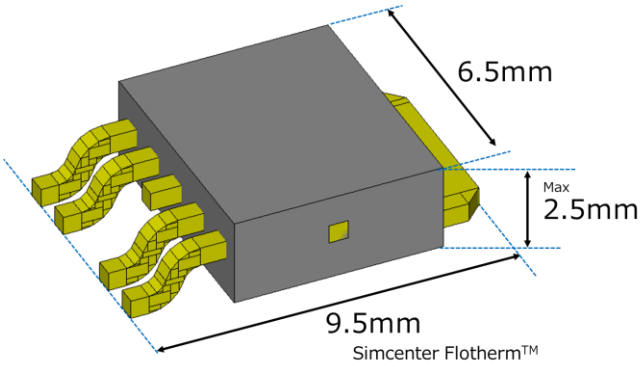


2-resistor model network

3D Model Shape



Two-resistor model



Detailed model

References

[1] JESD15-3:2008, *Two-Resistor Compact Thermal Model Guideline*

[2] '*Two-Resistor Model for Thermal Simulation*' ROHM

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