

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Thermal standardization on semiconductor packages -
Part 6: Thermal resistance and capacitance model for transient temperature
prediction at junction and measurement points**

**Normalisation thermique des boîtiers de semiconducteurs -
Partie 6: Modèle de résistance thermique et de capacité pour la prédiction de la
température transitoire aux points de jonction et de mesure**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Thermal standardization on semiconductor packages -
Part 6: Thermal resistance and capacitance model for transient
temperature prediction at junction and measurement points**

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IEC 63378-6 has been prepared by subcommittee 47D: Semiconductor devices packaging, of IEC Technical Committee 47: Semiconductor devices. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
47D/991/CDV	47D/998/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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INTRODUCTION

The IEC 63378-6 series is composed of the following parts:

- IEC 63378-6-1 [1]^{1,2} defines the model creation method using a datasheet of semiconductor devices.
- IEC 63378-6-2³ defines the model creation method using measurement data of semiconductor devices.

The IEC 63378-6 series includes subjects such as the definition of a new thermal compact model for thermal transient analysis of semiconductor packages, model creation methods, accuracy assessment of these models, etc.

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¹ Numbers in square brackets refer to the Bibliography.

² Under preparation. Stage at the time of publication: IEC APUB 63378-6-1:2026.

³ Under development.