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Part 49: Temperature and humidity test methods for piezoelectric MEMS cantilevers**

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Semiconductor devices - Micro-electromechanical devices - Part 49: Temperature and humidity test methods for piezoelectric MEMS cantilevers

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

Draft	Report on voting
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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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– withdrawn, or

– revised.

1 Scope

This part of IEC 62047 specifies reliability test methods of electro-mechanical conversion characteristics of piezoelectric thin film on microcantilever, which is typical structure of micro sensors and micro actuators. In order to estimate the stability of the piezoelectric coefficient of the piezoelectric thin films with microscale structures in the operating conditions, this document reports the schema to determine the characteristic parameters for consumer, industry or any other applications of piezoelectric MEMS devices. This document applies to piezoelectric thin films on microcantilever fabricated by MEMS process.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62047-42, *Semiconductor devices - Micro-electromechanical devices - Part 42: Measurement methods of electro-mechanical conversion characteristics of piezoelectric MEMS cantilever*