

# INTERNATIONAL STANDARD

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**Semiconductor devices – Micro-electromechanical devices –  
Part 33: MEMS piezoresistive pressure-sensitive device**





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**Semiconductor devices – Micro-electromechanical devices –  
Part 33: MEMS piezoresistive pressure-sensitive device**

INTERNATIONAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**SEMICONDUCTOR DEVICES –  
MICRO-ELECTROMECHANICAL DEVICES –**
**Part 33: MEMS piezoresistive pressure-sensitive device**

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International Standard IEC 62047-33 has been prepared by subcommittee 47F: Micro-electromechanical systems, of IEC technical committee 47: Semiconductor devices.

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

FDIS	Report on voting
47F/327FDIS	47F/332/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62047 series, published under the general title *Semiconductor devices – Micro-electromechanical devices*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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## SEMICONDUCTOR DEVICES – MICRO-ELECTROMECHANICAL DEVICES –

### Part 33: MEMS piezoresistive pressure-sensitive device

#### 1 Scope

This part of IEC 62047 defines terms, definitions, essential ratings and characteristics, as well as test methods applicable to MEMS piezoresistive pressure-sensitive device. This document applies to piezoresistive pressure-sensitive devices for automotive, medical treatment, electronic products.

#### 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 60068-2-1, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-10, *Environmental testing – Part 2-10: Tests – Test J and guidance: Mould growth*

IEC 60747-14-3, *Semiconductor devices – Part 14-3: Semiconductor sensors – Pressure sensors*

IEC 60749-2, *Semiconductor devices-Mechanical and climatic test methods – Part 2: Low air pressure*

IEC 60749-6, *Semiconductor devices-Mechanical and climatic test methods – Part 6: Storage at high temperature*

IEC 60749-10, *Semiconductor devices – Mechanical and climatic tests methods – Part 10: Mechanical shock*

IEC 60749-12, *Semiconductor devices – Mechanical and climatic tests methods – Part 12: Vibration, variable frequency*

IEC 60749-13, *Semiconductor devices – Mechanical and climatic test methods – Part 13: Salt atmosphere*

IEC 60749-24, *Semiconductor devices – Mechanical and climatic test methods – Part 24: Accelerated moisture resistance-Unbiased HAST*

IEC 60749-25, *Semiconductor devices – Mechanical and climatic test methods – Part 25: Temperature cycling*

IEC 60749-36, *Semiconductor devices – Mechanical and climatic tests methods – Part 36: Acceleration, steady state*