IEC 62047-47

Edition 1.0 2024-06

PRE-RELEASE VERSION (FDIS)

Semiconductor devices – Micro-electromechanical devices – Part 47: Silicon based MEMS fabrication technology – Measurement method of bending strength of microstructures

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 31.080.99

47F/474/FDIS

FINAL DRAFT INTERNATIONAL STANDARD (FDIS)

PROJECT NUMBER: **IEC 62047-47 ED1**	
DATE OF CIRCULATION: **2024-06-21**	CLOSING DATE FOR VOTING: **2024-08-02**
SUPERSEDES DOCUMENTS: **47F/433/CDV, 47F/446A/RVC**	

IEC SC 47F : MICRO-ELECTROMECHANICAL SYSTEMS	
SECRETARIAT: Japan	SECRETARY: Mr Takashi Mihara
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL STANDARD: ☐
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	
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TITLE:

Semiconductor devices - Micro-electromechanical devices - Part 47: Silicon based MEMS fabrication technology - Measurement method of bending strength of microstructures

PROPOSED STABILITY DATE: 2028

NOTE FROM TC/SC OFFICERS:

This draft of FDIS is devised based on 47F/446A/RVC.

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SEMICONDUCTOR DEVICES – MICRO-ELECTROMECHANICAL DEVICES –

Part 47: Silicon based MEMS fabrication technology – Measurement method of bending strength of microstructures

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

Draft	Report on voting
47F/XX/FDIS	47F/XX/RVD

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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The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under 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 47: Silicon based MEMS fabrication technology – Measurement method of bending strength of microstructures

1 Scope

This part of IEC 62047 specifies the requirements and testing method to measure the bending strength of microstructures which are fabricated by micromachining technology used in silicon-based micro-electromechanical system (MEMS).

This document is applicable to the in-situ bending strength measurement of microstructures manufactured by microelectronic technology process and other micromachining technology.

With the devices scaling, the bending strength degradation, induced by defects and contaminations, becomes more severe. This document specifies an in-situ testing method of the bending strength based on MEMS technique. This document does not need intricate instruments (such as scanning probe microscopy and nanoindenter) and special test specimens.

Since in-situ on-chip tester in this document and device are fabricated with the same process on the same wafer, this document can give some practical reference for the design part.

2 Normative references

There are no normative references in this document.