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Semiconductor devices - Micro-electromechanical devices - Part 21: Test method for Poisson's ratio of thin film MEMS materials

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/15

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 62047-21

September 2014

ICS 31.080.99

English Version

**Semiconductor devices - Micro-electromechanical devices -
Part 21: Test method for Poisson's ratio of thin film MEMS
materials
(IEC 62047-21:2014)**

Dispositifs à semiconducteurs - Dispositifs
microélectromécaniques -
Partie 21: Méthode d'essai relative au coefficient de
Poisson des matériaux MEMS en couche mince
(CEI 62047-21:2014)

Halbleiterbauelemente - Bauelemente der
Mikrosystemtechnik -
Teil 21: Prüfverfahren zur Querkontraktionszahl von
Dünnschichtwerkstoffen der Mikrosystemtechnik
(IEC 62047-21:2014)

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The text of document 47F/185/FDIS, future edition 1 of IEC 62047-21, prepared by SC 47F "Microelectromechanical systems" of IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62047-21:2014.

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(normative)

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62047-8	2011	Semiconductor devices - Micro-electromechanical devices - Part 8: Strip bending test method for tensile property measurement of thin films	EN 62047-8	2011
ASTM E132-04	2010	Standard test method for Poisson's ratio at room temperature	-	-



INTERNATIONAL STANDARD

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**Semiconductor devices – Micro-electromechanical devices –
Part 21: Test method for Poisson's ratio of thin film MEMS materials**

**Dispositifs à semiconducteurs – Dispositifs microélectromécaniques –
Partie 21: Méthode d'essai relative au coefficient de Poisson des matériaux
MEMS en couche mince**





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Part 21: Test method for Poisson's ratio of thin film MEMS materials**

**Dispositifs à semiconducteurs – Dispositifs microélectromécaniques –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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47F/185/FDIS	47F/189/RVD

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

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SEMICONDUCTOR DEVICES – MICRO-ELECTROMECHANICAL DEVICES –

Part 21: Test method for Poisson's ratio of thin film MEMS materials

1 Scope

This part of IEC 62047 specifies the determination of Poisson's ratio from the test results obtained by the application of uniaxial and biaxial loads to thin-film micro-electromechanical systems (MEMS) materials with lengths and widths less than 10 mm and thicknesses less than 10 μm .

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