

Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2-501: Test methods for materials for interconnection structures - Measurement of resilience strength and resilience strength retention factor of flexible dielectric materials

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61189-2-501:2022 sisaldab Euroopa standardi EN IEC 61189-2-501:2022 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61189-2-501:2022 consists of the English text of the European standard EN IEC 61189-2-501:2022.
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English Version

Test methods for electrical materials, printed boards and other
interconnection structures and assemblies - Part 2-501: Test
methods for materials for interconnection structures -
Measurement of resilience strength and resilience strength
retention factor of flexible dielectric materials
(IEC 61189-2-501:2022)

Méthodes d'essai pour les matériaux électriques, les cartes
imprimées et autres structures d'interconnexion et
ensembles - Partie 2-501: Méthodes d'essai des matériaux
pour structures d'interconnexion - Mesure de la puissance
élastique et du facteur de rétention de la puissance
élastique des matériaux diélectriques flexibles
(IEC 61189-2-501:2022)

Prüfverfahren für Elektromaterialien, Leiterplatten und
andere Verbindungsstrukturen und Baugruppen - Teil 2-
501: Prüfverfahren für Materialien für
Verbindungsstrukturen - Messung der Belastbarkeit und
Belastbarkeit Rückhaltefaktor flexibler dielektrischer
Materialien
(IEC 61189-2-501:2022)

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European foreword

The text of document 91/1765/FDIS, future edition 1 of IEC 61189-2-501, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61189-2-501:2022.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-12-10
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INTERNATIONAL STANDARD

NORME INTERNATIONALE



Test methods for electrical materials, printed boards and other interconnection structures and assemblies –

Part 2-501: Test methods for materials for interconnection structures –

Measurement of resilience strength and resilience strength retention factor of flexible dielectric materials

Méthodes d'essai pour les matériaux électriques, les cartes imprimées et autres structures d'interconnexion et ensembles –

Partie 2-501: Méthodes d'essai des matériaux pour structures d'interconnexion –

Mesure de la puissance élastique et du facteur de rétention de la puissance élastique des matériaux diélectriques flexibles



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



Test methods for electrical materials, printed boards and other interconnection structures and assemblies –

**Part 2-501: Test methods for materials for interconnection structures –
Measurement of resilience strength and resilience strength retention factor of
flexible dielectric materials**

**Méthodes d'essai pour les matériaux électriques, les cartes imprimées et autres
structures d'interconnexion et ensembles –**

**Partie 2-501: Méthodes d'essai des matériaux pour structures d'interconnexion –
Mesure de la puissance élastique et du facteur de rétention de la puissance
élastique des matériaux diélectriques flexibles**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS
AND OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –****Part 2-501: Test methods for materials for interconnection structures –
Measurement of resilience strength and resilience strength retention
factor of flexible dielectric materials**

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

Draft	Report on voting
91/1765/FDIS	91/1774/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/standardsdev/publications.

A list of all parts in the IEC 61189 series, published under the general title *Test methods for electrical materials, printed boards and other interconnection structures and assemblies*, can be found on the IEC website.

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TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS AND OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –

Part 2-501: Test methods for materials for interconnection structures – Measurement of resilience strength and resilience strength retention factor of flexible dielectric materials

1 Scope

This part of IEC 61189 establishes a method suitable for testing the softness of FCCL (Flexible Copper Clad Laminate) products and related materials. This method determines the resilience under specified conditions. The test is performed on the sample as manufactured and without conditioning. The test does not apply to the resilience force lower than 10 mN.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

softness

property of little resistance to pressure

Note 1 to entry: This property enables easy molding.

3.2

resilience force

force produced by the deformation of an object under a force, which is opposite to the direction of the applied force

3.3

maximum resilience force

$L_{\max}$

resilience force when compressed to the final distance, expressed in millinewtons (mN)

3.4

resilience strength

$F_{\max}$

resilience force per unit width, expressed in millinewtons per millimetres (mN/mm)