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Mönsterkort –

Provning av material för mönsterkort, mönsterkort och kretskort –

Del 2-721: Provning av material för mönsterkort och liknande –

Mätning av relativ permittivitet och förlustfaktor vid mikrovågsfrekvens för kopparbelagt laminat med hjälp av dielektrisk split-postresonator

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

Part 2-721: Test methods for materials for interconnection structures –

Measurement of relative permittivity and loss tangent for copper clad laminate at microwave frequency using split post dielectric resonator

Som svensk standard gäller europastandarden EN 61189-2-721:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61189-2-721:2015.

Nationellt förord

Europastandarden EN 61189-2-721:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61189-2-721, First edition, 2015 - Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2-721: Test methods for materials for interconnection structures - Measurement of relative permittivity and loss tangent for copper clad laminate at microwave frequency using split post dielectric resonator**

utarbetad inom International Electrotechnical Commission, IEC.

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English Version

Test methods for electrical materials, printed boards and other
interconnection structures and assemblies - Part 2-721: Test
methods for materials for interconnection structures -
Measurement of relative permittivity and loss tangent for copper
clad laminate at microwave frequency using split post dielectric
resonator
(IEC 61189-2-721:2015)

Méthodes d'essai pour les matériaux électriques, les cartes
imprimées et autres structures d'interconnexion et
ensembles - Partie 2-721: Méthodes d'essai des matériaux
pour structures d'interconnexion - Mesure de la permittivité
relative et de la tangente de perte pour les stratifiés
recouverts de cuivre en hyperfréquences à l'aide d'un
résonateur diélectrique en anneaux fendus
(IEC 61189-2-721:2015)

Prüfverfahren für Elektromaterialien, Leiterplatten und
andere Verbindungsstrukturen und Baugruppen - Teil 2-
721: Prüfverfahren für Verbindungsstrukturen (Leiterplatten)
- Messung der relativen Permittivität und des Verlustfaktors
von kupferkaschiertem Laminat im Mikrowellen-
Frequenzbereich unter Verwendung eines Split Post
dielektrischen Resonators
(IEC 61189-2-721:2015)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 91/1246/FDIS, future edition 1 of IEC 61189-2-721, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61189-2-721:2015.

The following dates are fixed:

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The text of the International Standard IEC 61189-2-721:2015 was approved by CENELEC as a European Standard without any modification.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS AND
OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –****Part 2-721: Test methods for materials for interconnection structures –
Measurement of relative permittivity and loss tangent for copper clad
laminate at microwave frequency using split post dielectric resonator**

FOREWORD

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International Standard IEC 61189-2-721 has been prepared by IEC technical committee 91: Electronics assembly technology.

The text of this standard is based on the following documents:

FDIS	Report on voting
91/1246/FDIS	91/1258/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.

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.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

Part 2-721: Test methods for materials for interconnection structures – Measurement of relative permittivity and loss tangent for copper clad laminate at microwave frequency using split post dielectric resonator

1 Scope

This part of IEC 61189 outlines a way to determine the relative permittivity (ϵ_r) and loss tangent ($\tan\delta$) (also called dielectric constant (Dk) and dissipation factor (Df)) of copper clad laminates at microwave frequencies (from 1,1 GHz to 20 GHz) using a split post dielectric resonator (SPDR).

This part of IEC 61189 is applicable to copper clad laminates and dielectric base materials.