
Dielektrični resonatorji valovodnega tipa - 1-5. del: Splošni podatki in pogoji preskušanja - Metoda za meritve prevodnosti na vmesniku med prevodno plastjo in dielektričnim substratom pri mikrovalovni frekvenci

Waveguide type dielectric resonators - Part 1-5: General information and test conditions - Measurement method of conductivity at interface between conductor layer and dielectric substrate at microwave frequency

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Résonateurs diélectriques à modes guidés - Partie 1-5: Informations générales et conditions d'essais - Méthode de mesure de la conductivité au niveau de l'interface entre une couche conductrice et un substrat diélectrique fonctionnant aux hyperfréquences

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 61338-1-5:2015**European foreword**

The text of document 49/1089/CDV, future edition 1 of IEC 61338-1-5, prepared by IEC/TC 49 "Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61338-1-5:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-04-30
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61338-1-3	-	Waveguide type dielectric resonators -- Part 1-3: General information and test conditions - Measurement method of complex relative permittivity for dielectric resonator materials at microwave frequency	EN 61338-1-3	-
IEC 62252	-	Maritime navigation and radiocommunication equipment and systems - Radar for craft not in compliance with IMO SOLAS Chapter V - Performance requirements, methods of test and required test results	EN 62252	-

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**Waveguide type dielectric resonators –
Part 1-5: General information and test conditions – Measurement method of
conductivity at interface between conductor layer and dielectric substrate at
microwave frequency**

SIST EN 61338-1-5:2015

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**Résonateurs diélectriques à modes guidés –
Partie 1-5: Informations générales et conditions d'essais – Méthode de mesure
de la conductivité au niveau de l'interface entre une couche conductrice et un
substrat diélectrique fonctionnant aux hyperfréquences**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WAVEGUIDE TYPE DIELECTRIC RESONATORS –

**Part 1-5: General information and test conditions –
Measurement method of conductivity at interface between
conductor layer and dielectric substrate at microwave frequency**

FOREWORD

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International Standard IEC 61338-1-5 has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This first edition cancels and replaces IEC PAS 61338-1-5 published in 2010.

This edition includes the following significant technical changes with respect to the previous edition:

- a) description of technical content related to patents (Japanese patent numbers JP3634966, JP3735501) in the Introduction;
- b) changes to normative references;
- c) addition to bibliography.

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

CDV	Report on voting
49/1089/CDV	49/1103/RVC

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

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

A list of all parts in the IEC 61338 series, published under the general title *Waveguide type dielectric resonators*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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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INTRODUCTION

IEC 61338 consists of the following parts, under the general title *Waveguide type dielectric resonators*:

- Part 1: Generic specification
- Part 1-3: General information and test conditions – Measurement method of complex relative permittivity for dielectric resonator materials at microwave frequency
- Part 1-4: General information and test conditions – Measurement method of complex relative permittivity for dielectric resonator materials at millimeter-wave frequency
- Part 2: Guidelines for oscillator and filter applications
- Part 4: Sectional specification
- Part 4-1: Blank detail specification

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning:

- The use of a TE_{010} mode dielectric rod resonator for the interface resistance and the interface conductivity measurement, given in Clause 4;
- The use of a substrate/conductor/substrate layer structure, where a conductor is formed between two dielectric substrates, for the interface resistance and interface conductivity measurement, given in Clause 5.

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