

SLOVENSKI STANDARD SIST EN 61240:2017

01-april-2017

Nadomešča:

SIST EN 61240:2012

Piezoelektrični elementi - Priprava tehničnih risb površinsko montiranega elementa (SMD) za frekvenčno regulacijo in filtriranje - Splošna pravila (IEC 61240:2016)

Piezoelectric devices - Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection - General rules (IEC 61240:2016)

iTeh STANDARD PREVIEW

Piezoelektrische Bauelemente - Anfertigung von Gehäusezeichnungen von oberflächenmontierbaren Bauelementen (SMD) zur Frequenz-Stabilisierung und - Selektion - Allgemeine Regeln (IEC 61240:2016)

<u>SIST EN 61240:2017</u>

https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-

Dispositifs piézoélectriques - Préparation des dessins d'encombrement des dispositifs à montage en surface pour la commande et le choix de la fréquence - Règles générales (IEC 61240:2016)

Ta slovenski standard je istoveten z: EN 61240:2017

ICS:

31.140 Piezoelektrične naprave Piezoelectric devices

SIST EN 61240:2017 en

SIST EN 61240:2017

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61240:2017

https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61240

January 2017

ICS 31.140

Supersedes EN 61240:2012

English Version

Piezoelectric devices - Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection - General rules (IEC 61240:2016)

Dispositifs piézoélectriques - Préparation des dessins d'encombrement des dispositifs à montage en surface pour la commande et le choix de la fréquence - Règles générales (IEC 61240:2016) Piezoelektrische Bauelemente - Anfertigung von Gehäusezeichnungen von oberflächenmontierbaren Bauelementen (SMD) zur Frequenz-Stabilisierung und -Selektion - Allgemeine Regeln (IEC 61240:2016)

This European Standard was approved by CENELEC on 2016-11-28. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member. In Clark Standards. 110.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions tandards itch avcatalog/standards/sist/94172951-2b5b-475d-

b363-3a6ee93dc873/sist-en-61240-2017

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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 61240:2017

European foreword

The text of document 49/1172/CDV, future edition 3 of IEC 61240, 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 61240:2017.

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)	2017-08-28
	standard or by endorsement		

 latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-11-28

This document supersedes EN 61240:2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61240:2016 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

ISO 5456-2 NOTE b363 Harmonized as EN ISO 5456-217

EN 61240:2017

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>	EN/HD	<u>Year</u>
IEC 60191-6	-	Mechanical standardization of semiconductor devices - Part 6: General rules for the preparation of outline drawings of surface mounted semiconductor device packages	EN 60191-6	-

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61240:2017 https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017 **SIST EN 61240:2017**

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61240:2017

https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017



IEC 61240

Edition 3.0 2016-10

INTERNATIONAL STANDARD

Piezoelectric devices Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection General rules

SIST EN 61240:2017 https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 31.140 ISBN 978-2-8322-3692-5

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREW	VORD	3
INTRO	DUCTION	5
1 Sc	ope	6
2 No	rmative references	6
3 Cla	assification of SMD	6
4 Tit	le of the outline drawing	6
5 Co	emposition of the outline drawing	6
5.1	Elements of outline drawings	6
5.2	Outline drawing	7
5.3	Table of detailed dimensions	7
5.4	Actual size sketch	7
5.5	Drawing of terminal land areas	7
5.6	Terminal lead details	7
6 Re	quirements for terminal leads	9
7 Re	quirements for the terminal land area	9
8 Co	nnections of terminal leads	9
9 De	scriptive notes Tell STANDARD PREWE	10
Annex /	A (informative) Miniaturized leadless ceramic enclosures of piezoelectric	
devices	s (SMD) for frequency control and selection. Iteh.ai)	13
A.1	Precise drawing	13
A.2	Requirements for enclosures with 3 terminals	15
A.3	Requirements for enclosures with 3 terminals https://standards.iteh.a/catalog/standards/sist/94172951-2b5b-475d- Naming rule for new type of enclosures Dispos-3a6ee/3dce/3dcs/3/sist-en-61240-2017	15
	B (informative) Example of terminal connections for surface-mounted	
	ectric devices (SMD) for frequency control and selection	
Bibliogr	aphy	18
Figure	1 – Illustration of terminal projection zone	8
Figure 2	2 – Example of a terminal land area	9
Figure A	A.1 – Upper part of the view from above	13
Figure A	A.2 – Front view (without a board)	14
_	A.3 – Front view (with a board)	
Table A	v.1 – Scale of drawings	13
Table A	A.2 – Guideline for dimension table	14
Table A	A.3 – Guideline for column "Max." of Table A.2 for A, B	15
Table A	x.4 – Examples of correspondence between new and old enclosures	16
Table B	3.1 – Examples of terminal connections for various types of piezoelectric	
devices)	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PIEZOELECTRIC DEVICES – PREPARATION OF OUTLINE DRAWINGS OF SURFACE-MOUNTED DEVICES (SMD) FOR FREQUENCY CONTROL AND SELECTION – GENERAL RULES

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies ards/sist/94172951-2b5b-475d-
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61240 has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This third edition cancels and replaces the second edition published in 2012. It constitutes a technical revision.

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

- outline drawings have been changed from three views (top, front and bottom) to that based on ISO layout in the third-angle projection, in which the view from the right has been added to the top, front and bottom views;
- reference line and geometrical dimensions of the package for enclosures have been changed for practical use;
- information on miniaturized leadless ceramic enclosures of piezoelectric devices (SMD) for frequency control and selection has been included in an annex.

-4-

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

CDV	Report on voting
49/1172/CDV	49/1188/RVC

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

This document 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.

A bilingual version of this publication may be issued at a later date.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61240:2017 https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017 IEC 61240:2016 © IEC 2016

- 5 -

INTRODUCTION

The enclosures of quartz crystal resonators and oscillators are unified in this third edition of IEC 61240.

Regarding the current situation of many quartz crystal device suppliers, many of them use their own enclosure layouts in their catalogues. For the convenience of consumers, general rules of enclosure layout and definition of size need to be unified.

The reasons prompting the revision of IEC 61240:2012 are as follows:

- a) The height of packages should not be included in a drawing. Only the total height of enclosures should be expressed.
- b) In small enclosure types, the size tolerance in smaller enclosures will not meet the conditions defined in Table A.3 (Annex A).

In newly proposed general rules of outline drawings, only the total height of enclosures should be expressed and the size tolerance in smaller enclosures is revised.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 61240:2017</u> https://standards.iteh.ai/catalog/standards/sist/94172951-2b5b-475d-b363-3a6ee93dc873/sist-en-61240-2017