

<b>STN</b>	<b>Piezelektrické súčiastky. Príprava výkresov rozmerov súčiastok na povrchovú montáž na riadenie a filtráciu frekvencie (SMD). Všeobecné pravidlá.</b>	<b>STN EN 61240</b>  35 8400
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Piezoelectric devices - Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection - General rules

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. 05/17

Obsahuje: EN 61240:2017, IEC 61240:2016

Oznámením tejto normy sa od 28.11.2019 ruší  
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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017  
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

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)

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European Committee for Electrotechnical Standardization  
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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
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ISO 1101	NOTE	Harmonized as EN ISO 1101.
ISO 5456-2	NOTE	Harmonized as EN ISO 5456-2.

## 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](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<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	-



# INTERNATIONAL STANDARD

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





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IEC 61240

Edition 3.0 2016-10

# INTERNATIONAL STANDARD

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

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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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.

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.

## 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.

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

## 1 Scope

This International Standard sets out general rules for drawing all dimensional and geometrical characteristics of a surface-mounted piezoelectric device package (referred to in this document as SMD) in order to ensure mechanical inter-changeability of all outline drawings of the SMDs for frequency control and selection.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60191-6, *Mechanical standardization of semiconductor devices – Part 6: General rules for*

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