



BSI Standards Publication

# Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections

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Part 2: Ceramic enclosures

## National foreword

This British Standard is the UK implementation of EN IEC 61837-2:2018+A1:2020. It is identical to IEC 61837-2:2018, incorporating amendment 1:2020. It supersedes BS EN IEC 61837-2:2018, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by  $\boxed{A1}$   $\langle A1 \rangle$ .

The UK participation in its preparation was entrusted to Technical Committee EPL/49, Piezoelectric devices for frequency control and selection.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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### Amendments/corrigenda issued since publication

Date	Text affected
30 November 2020	Implementation of IEC amendment 1:2020 with CENELEC endorsement A1:2020

EUROPEAN STANDARD

**EN IEC 61837-2:2018+A1**

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EUROPÄISCHE NORM

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English Version

Surface mounted piezoelectric devices for frequency control and  
selection - Standard outlines and terminal lead connections -  
Part 2: Ceramic enclosures  
(IEC 61837-2:2018)

Dispositifs piézoélectriques à montage en surface pour la  
commande et le choix de la fréquence - Encombrements  
normalisés et connexions des sorties - Partie 2: Enveloppes  
en céramique  
(IEC 61837-2:2018)

Oberflächenmontierbare piezoelektrische Bauteile zur  
Frequenzstabilisierung und -selektion - Norm-  
Gehäusemaße und Anschlüsse - Teil 2: Keramikgehäuse  
(IEC 61837-2:2018)

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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.

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.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## European foreword

The text of document 49/1252/CDV, future edition 3 of IEC 61837-2, 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 IEC 61837-2:2018.

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) 2019-03-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-06-12

This document supersedes EN 61837-2:2011.

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

IEC 60122-3:2010	NOTE	Harmonized as EN 60122-3:2010 (not modified).
IEC 60191-6:2009	NOTE	Harmonized as EN 60191-6:2009 (not modified).
IEC 60368-1:2000	NOTE	Harmonized as EN 60368-1:2000 (not modified).
IEC 60368-2-2:1996	NOTE	Harmonized as EN 60368-2-2:1999 (not modified).
IEC 60368-3:2010	NOTE	Harmonized as EN 60368-3:2010 (not modified).
IEC 60679-1:2017	NOTE	Harmonized as EN 60679-1:2017 (not modified).
IEC 60679-3:2012	NOTE	Harmonized as EN 60679-3:2013 (not modified).
IEC 60862-1:2015	NOTE	Harmonized as EN 60862-1:2015 (not modified).
IEC 60862-2:2012	NOTE	Harmonized as EN 60862-2:2012 (not modified).
IEC 60862-3:2003	NOTE	Harmonized as EN 60862-3:2003 (not modified).
IEC 61019-1:2004	NOTE	Harmonized as EN 61019-1:2005 (not modified).
IEC 61019-2:2005	NOTE	Harmonized as EN 61019-2:2005 (not modified).
ISO 1101:2017	NOTE	Harmonized as EN ISO 1101:2017 (not modified).

## Foreword to amendment A1

The text of document 49/1338/CDV, future IEC 61837-2/A1, 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 IEC 61837-2:2018/A1:2020.

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) 2021-07-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-29

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### Endorsement notice

The text of the International Standard IEC 61837-2:2018/A1:2020 was approved by CENELEC as a European Standard without any modification.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR  
FREQUENCY CONTROL AND SELECTION – STANDARD  
OUTLINES AND TERMINAL LEAD CONNECTIONS –****Part 2: Ceramic enclosures**

## FOREWORD

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International Standard IEC 61837-2 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 2011 and Amendment 1:2014. This edition constitutes a technical revision.

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

- a) revision of the figures to match the notation of the drawings of IEC 61240:2016;
- b) addition of 7 enclosures as follows: DCC-6/5032A, DCC-6/3225A, DCC-4/3215C, DCC-6/2016A, DCC-2/2012C, DCC-2/1610C, DCC-4/1210C.

As a result, this third edition contains a total of 45 enclosure types, which are listed in Table 1.



IEC 61837-2:2018+A1:2020  
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This International Standard is to be read in conjunction with IEC 61240:2016.

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

CDV	Report on voting
49/1252/CDV	49/1276/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.

A list of all parts in the IEC 61837 series, published under the general title *Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections*, can be found on the IEC website.

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

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

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

# **SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION – STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –**

## **Part 2: Ceramic enclosures**

### **1 Scope**

This part of IEC 61837 deals with standard outlines and terminal lead connections as they apply to surface-mounted devices (SMD) for frequency control and selection in ceramic enclosures, and is based on IEC 61240:2016.

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

### **3 Terms and definitions**

No terms and definitions are listed in this document.

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>

### **4 Configuration of enclosures**

The enclosures of the surface-mounted devices are made of ceramic materials with the terminals of deposited metal film (leadless type) based on a descriptive designation system for semiconductors – devices packages.

The configuration symbols are shown as follows:

- DCC (dual chip carrier);
- QCC (quad chip carrier).

### **5 Designation of types**

The designation of types is shown on four parts as follows: