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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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This consolidated version of the official IEC Standard and its amendments has been prepared for user convenience.

IEC 61837-2 edition 3.2 contains the third edition (2018-05) [documents 49/1252/CDV and 49/1276/RVC], its amendment 1 (2020-09) [documents 49/1338/CDV and 49/1347/RVC] and its amendment 2 (2026-06) [documents 49/1523/CDV and 49/1534/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendments 1 and 2. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

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 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.

This International Standard is to be read in conjunction with IEC 61240:2016.

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 and its amendments will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

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*

Bibliography

IEC 60122-2:1983, *Quartz crystal units for frequency control and selection – Part 2: Guide to the use of quartz crystal units for frequency control and selection*

IEC 60122-3:2010, *Quartz crystal units of assessed quality – Part 3: Standard outlines and lead connections*

IEC 60191-6:2009, *Mechanical standardization of semiconductor devices – Part 6: General rules for the preparation of outline drawings of surface mounted semiconductor device packages*

IEC 60368-1:2000, *Piezoelectric filters of assessed quality – Part 1: Generic specification*

IEC 60368-2-1:1988, *Piezoelectric filters – Part 2: Guide to the use of piezoelectric filters – Section One: Quartz crystal filters*

IEC 60368-2-2:1996, *Piezoelectric filters – Part 2: Guide to the use of piezoelectric filters – Section 2: Piezoelectric ceramic filters*

IEC 60368-3:2010, *Piezoelectric filters of assessed quality – Part 3: Standard outlines and lead connections*

IEC 60679-1:2017, *Piezoelectric, dielectric and electrostatic oscillators of assessed quality – Part 1: Generic specification*

IEC 60679-2:1981, *Quartz crystal controlled oscillators – Part 2: Guide to the use of quartz crystal controlled oscillators*

IEC 60679-3:2012, *Quartz crystal controlled oscillators of assessed quality – Part 3: Standard outlines and lead connections*

IEC 60862-1:2015, *Surface acoustic wave (SAW) filters of assessed quality – Part 1: Generic specification*

IEC 60862-2:2012, *Surface acoustic wave (SAW) filters of assessed quality – Part 2: Guidelines for the use*

IEC 60862-3:2003, *Surface acoustic wave (SAW) filters of assessed quality – Part 3: Standard outlines*

IEC 61019-1:2004, *Surface acoustic wave (SAW) resonators – Part 1: Generic specification*

IEC 61019-2:2005, *Surface acoustic wave (SAW) resonators – Part 2: Guide to the use*

ISO 1101:2017, *Geometrical product specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out*