

# FINAL VERSION

# VERSION FINALE

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

**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**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 2: Ceramic enclosures**

FOREWORD

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**This Consolidated version of IEC 61837-2 bears the edition number 2.1. It consists of the second edition (2011-05) [documents 49/884/CDV and 49/908/RVC] and its amendment 1 (2014-03) [documents 49/1078/CDV and 49/1094/RVC]. The technical content is identical to the base edition and its amendment.**

**This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.**

**This publication has been prepared for user convenience.**

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.

In this edition, types of enclosures are renamed to express their features in their names for better understanding. The relative comparison of new types with old ones is listed in Table. 1. New names of enclosures express configuration type, terminal lead numbers, sizes and arrangement of terminal pads. The details of definition are shown in Clause 3: Configuration of enclosures, and Clause 4: Designation of types.

Enclosures in this new edition are based on IEC 61240. In this standard, 27 enclosures are added to the first edition of IEC 61837-2, as follows:

QCC-12/1407A, DCC-2/1206A, QCC-10/9272A, DCC-4/9070A, DCC-2-8045B, DCC-6/7834B, DCC-6/7050A, QCC-10/7050A, DCC-4/6035C, DCC-2/6035C, QCC-8/5045A, DCC-4/5032A, DCC-4/5032C, DCC-2/4818C, DCC-2/4115C, QCC-8/3838A, DCC-6/3838A, DCC-4/3225C, DCC-2/3215C, QCC-8/3030B, DCC-6/3030A, DCC-6/2520A, DCC-4/2520C, DCC-4/2020C, DCC-4/2016C, DCC-4/1612C, DCC-2/1612C.

As a result, the new version (the second edition) contains a total of 38 enclosure types, which are listed in Table 1 – Designation of ceramic enclosures.

This standard is to be read in conjunction with IEC 61240.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

A list of all parts of 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 the base publication and its amendment 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.

# 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.

### 2 Normative references

The following referenced documents are indispensable for the application 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, *Piezoelectric devices – Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection – General rules*

### 3 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 descriptive designation system for semiconductors – devices package.

The configuration symbols are shown as follows:

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

### 4 Designation of types

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



A: Configuration symbol of enclosures:

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

B: Structure of terminal leads: leadless type has no mark.

C: Number of terminal leads