

**Harmonized system of quality
assessment for electronic components**

Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte

The European Standard EN 130200:1993, with the incorporation of its amendment A3:1998, has the status of a British Standard

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Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Electronic Components Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 December 1993

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10078	January 1999	See foreword to amendment A3 on page 2 NOTE There was no amendment 1 to EN 130200

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National foreword

This British Standard has been prepared under the direction of the Electronic Components Standards Policy Committee. It is the English language version of EN 130200:1993 *Harmonized system of quality assessment for electronic components. Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte*, including amendment A3:1998 published by the Electronic Components Committee (CECC) of the European Committee for Electrotechnical Standardization (CENELEC). Amendment A3 incorporates amendment A2.

It supersedes BS CECC 30200:1986 which is withdrawn.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 24, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Descriptors: Quality, electronic components, capacitors

English version

Sectional Specification: Fixed Tantalum Capacitors with Non-Solid or Solid Electrolyte

(includes amendment A3:1998)

Spécification intermédiaire:

Condensateurs fixes au tantale à électrolyte non
solide ou solide
(inclut l'amendement A3:1998)

Rahmenspezifikation:

Tantal-Festkondensatoren mit festem oder
flüssigem Elektrolyten
(enthält Änderung A3:1998)

This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 27 January 1992; amendment A3 was approved by CENELEC on 1994-10-16. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

This object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This European Standard was prepared by CECC WG 3, Capacitors.

The text of the draft based on document CECC 30 200 Issue 2:1985 was submitted to the formal vote for conversion to a European Standard: together with the voting report, circulated as document CECC (Secretariat) 2995 it was approved by CECC as EN 130 200 on 27 January 1992.

The text of EN 130 200 consists of:

CECC 30 200 Issue 2 (with A1 to A6, A8 Erratum),

CECC (Sec) 2523/01.90

[RV CECC (Sec) 2995/12/91],

CECC (Sec) 2874/09.91

[RV CECC (Sec) 3088/04.92],

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1991-09-11
- latest date of publication of an identical national standard (dop) 1992-03-11
- latest date of declaration of national standards obsolescence 1992-03-11
- latest date of withdrawal of conflicting national standards (dow) 2001-09-11

Foreword to amendment A3

This amendment to the European Standard EN 130200 was prepared by CLC/TC CECC/SC 40XA (former WG 3), Capacitors.

The text of the draft based on document CECC (Secretariat) 3450 was submitted to the formal vote; together with the voting report, circulated as document CECC (Secretariat) 3550, it was approved as amendment A2 to EN 130200:1993 on 1994-05-15.

The text of the draft based on document CECC (Secretariat) 3541 was submitted to the formal vote; together with the voting report, circulated as document CECC (Secretariat) 3620, it was approved as amendment A3 to EN 130200:1993 on 1994-10-16.

This amendment A3 includes amendment A2.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-10-01
- latest date by which national standards conflicting with the amendment have to be withdrawn (dow) 1999-10-01

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1 General

1.1 Scope

This specification applies to polar and bipolar tantalum electrolytic capacitors with solid or non-solid electrolyte. It comprises capacitors for long-life applications and capacitors for general-purpose applications. Capacitors for special purpose application may need additional requirements. Surface mounting styled capacitors are not covered.

This specification covers three basic sub-families, namely:

Sub-family	1 :	Fixed non-solid electrolyte tantalum capacitors with foil electrode
	1A:	Plain foil electrode
	1B:	Etched foil electrode
Sub-family	2 :	Fixed non-solid electrolyte tantalum capacitors with porous anode
Sub-family	3 :	Fixed solid electrolyte tantalum capacitors with porous anode.

The object of this specification is to prescribe preferred ratings and characteristics and to select from the generic specification EN 130 000 the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor.

1.2 Related documents

ISO 3:1973, *Preferred numbers — Series of preferred numbers*.

IEC 62:1974, *Marking codes for resistors and capacitors*.

IEC 63:1963, *Preferred number series for resistors and capacitors*.

Amendment 1:1967

Amendment 2:1977.

IEC 68, *Basic environmental testing procedures*.

IEC 384-15:1982, *Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte*.

IEC 410:1973, *Sampling plans and procedures for inspection by attributes*.

CECC 00 014:1986, *CECC Assessed Process Average Procedure (APA)*.

EN 130 000:1993, *Generic specification: Fixed capacitors*.

1.3 Information to be given in a detail specification

Detail specifications shall be derived from the relevant blank detail specification.

Detail specifications shall not specify requirements inferior to those of the generic, sectional or blank detail specification. When more severe requirements are included, they shall be listed in 1.9 of the detail specification and indicated in the test schedules, for example by an asterisk.

The following information shall be given in each detail specification and the values quoted shall preferably be selected from those given in the appropriate clause of this sectional specification.

1.3.1 Dimensions and outline drawing

The detail specification shall give an illustration of the capacitor as an aid to easy recognition and for comparison of the capacitor with others. Dimensions and their associated tolerances, which affect interchangeability and mounting, shall be given. All dimensions shall be stated in mm.

NOTE The information may be presented in tabular form.

Normally the numerical values shall be given for the length, the width and height of the body and the wire spacing or for cylindrical types the body diameter, and the length and diameter of the terminations. When necessary, for example when a number of case sizes are covered by a detail specification, the dimensions and their associated tolerances shall be placed in a table below the drawing.

When the configuration is other than described above, the detail specification shall state such dimensional information as will adequately describe the capacitor. When the capacitor is not designed for use on printed boards, this shall be clearly stated in the detail specification.