SLOVENSKI STANDARD

SIST EN 130201:2006

februar 2006

Okvirna podrobna specifikacija: nespremenljivi tantalovi kondenzatorji s trdnim elektrolitom in porozno anodo (poddružina 3)

Blank Detail Specification: Fixed tantalum capacitors with solid electrolyte, porous anode (sub-family 3)

ICS 31.060.40

Referenčna številka
SIST EN 130201:2006(en)

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 130 201

June 1993

UDC

Supersedes CECC 30 201 Issue 2: 1985

Descriptors: Quality, electronic components, capacitors

English version

Blank Detail Specification:

Fixed Tantalum Capacitors with Solid Electrolyte, Porous Anode
(SUB-FAMILY 3)

Spécification particulière cadre:
Condensateurs fixes au tantale à électrolyte solide, à anode poreuse
(SOUS-FAMILLE 3)

Vordruck für Bauartspezifikation:
Tantal-Festkondensatoren mit festem Elektrolyten und Sinteranode
(UNTERFAMILIE 3)

This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 27 January 1992. CENELEC members are bound to comply with 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 General Secretariat of the CECC 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 CECC General 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.

CECC

CENELEC Electronic Components Committee
Comité des Composants Electroniques du CENELEC
CENELEC- Komitee für Bauelemente der Elektronik
General Secretariat: Gartenstr. 179, W- 6000 Frankfurt/Main 70

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.

The 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 30 201 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)2996 it was approved by CECC as EN 130 201 on 27 January 1992. The text of EN 130 201 consists of:

CECC 30 201 Issue 2 (with A1, A3 and A5),
CECC(Sec)2524/01.90 [RV CECC(Sec)2996/05.90],
CECC(Sec)2399/04.89 [RV CECC(Sec)2595/05.90],
CECC(Sec)2456/08.91 [RV CECC(Sec)2811/05.91].

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

IDENTIFICATION OF THE DETAIL SPECIFICATION AND THE COMPONENT

The first page of the detail specification should have the layout recommended on page 4 of this blank detail specification. The numbers in square brackets correspond to the following information which shall be inserted at the position indicated:

[1] The name of the National Standards Organization under whose authority the detail specification is published and, if applicable, the organization from whom the detail specification is available
[2] The CECC symbol and number allotted to the detail specification by the CECC General Secretariat
[3] The number and issue number of the CECC generic and sectional specification as relevant; also national reference if different
[4] If different from the CECC number, the national number of the detail specification, date of issue and any further information required by the national system, together with any amendment numbers
[5] A brief description of the component or range of components
[6] Information on typical construction when applicable

For [5] and [6] the text to be given in the detail specification should be suitable for an entry in CECC 00 200 (Register of Approvals) and CECC 00 300 (Library List).

[7] An outline drawing with main dimensions which are of importance for interchangeability and/or reference to the appropriate national or international document for outlines. Alternatively, the drawing may be given in an annex to the detail specification but [7] should always contain an illustration of the general outer appearance of the component
[8] The level(s) of quality assessment covered by the detail specification
[9] Reference data giving information on the most important properties of the component which allow comparison between the various component types intended for the same, or for similar, applications.

[1]	[2] EN 130 201-...
[3] ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH:	[4]
[7] OUTLINE DRAWING (first angle projection): (Other shapes are permitted within the dimensions given, see Table 1)	[5] DETAIL SPECIFICATION FOR FIXED TANTALUM ELECTROLYTIC CAPACITORS WITH SOLID ELECTROLYTE, POROUS ANODE (SUB-FAMILY 3)
	[6] TYPICAL CONSTRUCTION (Examples): cylindrical/rectangular non metallic/metallic case insulated/non insulated axial/radial terminations
	[8] ASSESSMENT LEVEL: E

[9]
REFERENCE DATA: Rated capacitance range, capacitance tolerance, d.c. rated voltage range, climatic category, performance grade

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200: Register of Firms, Products and Services Approved under the CECC System (Register of Approvals)

1 - GENERAL DATA

1.1 Method of mounting for vibration and bump or shock tests

See 1.3.2 of EN 130 200 : 1993

1.2 Dimensions

TABLE 1

Case size reference	Dimensions mm					
	D	L	H	d	.....	.....

NOTE 1 - When there is no case size reference, Table 1 may be omitted and the dimensions shall be given in Table 2A, which then becomes Table 1.
NOTE 2 - The dimensions shall be given as maximum dimensions or as nominal dimensions with a tolerance.

1.3 Ratings and characteristics

Capacitance range	(see Table 2A)
Tolerance on rated capacitance	
Rated voltage	(see Table 2A)
Category voltage (if applicable)	(see Table 2A)
Climatic category	
Rated temperature	
Capacitance change with temperature	(see Table 2B)
Tangent of loss angle (tan δ)	(see Table 2B)
Leakage current	(see Table 2B)
Impedance (if required)	(see Table 2C)
Surge	
Reverse voltage (if required)	

TABLE 2A
Values of capacitance related to voltages and case sizes

Rated voltage				
Category voltage V [1)]				
	Case size	Case size	Case size	Case size
Rated capacitance µF				

1) If different from the rated voltage

TABLE 2B
Characteristics at high and low temperature

U_R V	C_R µF	Capacitance change Z			Maximum values						
					tan δ				Leakage current µA		
		T_A	T_R	T_B	T_A	20 °C	T_R	T_B	20 °C	T_R	T_B 1)

T_A : Lower category temperature
T_B : Upper category temperature
T_R : Rated temperature

1) Measured with category voltage

TABLE 2C
Impedance at ...kHz (if required)

Case size	Impedance Ω

1.4 Related documents

Generic specification : EN 130 200 : 1993
Sectional specification: EN 130 200 : 1993

1.5 Marking

The marking of the capacitor, if any, and the packing shall be in accordance with 1.5 of EN 130 200.

NOTE - The details of the marking of the component and packing shall be given in full in the detail specification.

1.6 Ordering information

Orders for capacitors covered by this specification shall contain, in clear or coded form, the following minimum of information

(1) Rated capacitance
(2) Tolerance on rated capacitance
(3) Rated voltage
(4) Number and issue reference of the detail specification and style reference.

1.7 Certified test records of released lots

Required/not required.

1.8 Additional information (not for inspection purposes)

1.9 Additional or increased severities or requirements to those specified in the generic and/or sectional specification

NOTE - Additional or increased requirements should be specified only when essential.

TABLE 3
Other characteristics

This table is to be used for defining characteristics which are additional to or more severe than those given in the sectional specification

2 - INSPECTION REQUIREMENTS

2.1 Procedures

2.1.1 For Qualification Approval the procedures shall be in accordance with 3.4 of EN 130 200.

2.1.2 For Quality Conformance Inspection the test schedule (Table 4) includes sampling, periodicity, severities and requirements. The formation of inspection lots is covered by 3.5.1 of EN 130 200.

2.1.3 Assessed Process Average Procedure (APA), if required by the detail specification

If APA applies, see 3.6 of EN 130 200 and Note 5 to Table 4A of this blank detail specification.