

Förderverein für Elektrotechnische Normung (FEN) e. V.
Cenelec Electronic Components Committee

CECC

Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

SPECIFICATION PARTICULIERE:

CONDENSATEURS FIXES AU
TANTALE POUR MONTAGE EN
SURFACE A ELECTROLYTE
SOLIDE ET A ANODE POREUSE
A FUSIBLE INCORPORE

Harmonized System of Quality Assessment for
Electronic Components

DETAIL SPECIFICATION:

FIXED TANTALUM SURFACE
MOUNTING CAPACITORS WITH
SOLID ELECTROLYTE,
POROUS ANODE
FUSED

Harmonisiertes Gütebestätigungssystem für
Bauelemente der Elektronik

BAUARTSPEZIFIKATION:

OBERFLÄCHENMONTIERBARE
TANTAL-FESTKONDENSATOREN
MIT FESTEM ELEKTROLYTEN
UND SINTERANODE
MIT SICHERUNG



1

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Issue
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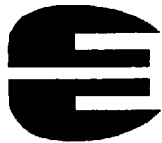
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*or from the National Authorized Institutions
of the participating countries listed
who can supply copies of:*

- 1 The Internal Regulations of the FEN e.V.
- 2 The Rules of Procedure of the System
- 3 CECC Specifications of the FEN and National Specifications for the System
- 4 CECC 00 200: Register of Firms, Products, and Services Approved under the CECC System
- 5 CECC 00 300: Register of National Documents Implementing CECC Publications and CECC European Standards
- 6 CECC 00 301: Register of CECC Specifications and Related Detail Specifications
- 7 Other CECC Publications and publicity documents

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 specification should be read in conjunction with the current regulations for the CECC System.

At the date of printing of this specification, the member countries of the CECC are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and copies of it can be obtained from the addresses shown on the blue fly sheet.

PREFACE

This specification was prepared by CECC WG3: "Capacitors".

It is based, wherever possible, on the Publications of the International Electrotechnical Commission (IEC).

The text of this specification was circulated to the members of CECC WG3 and was approved for publication under the accelerated procedure for the acceptance of detail specifications with Decisions 10,11 and 12 of the minutes of the CECC CD meeting in document CECC(Sec)1838.

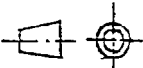
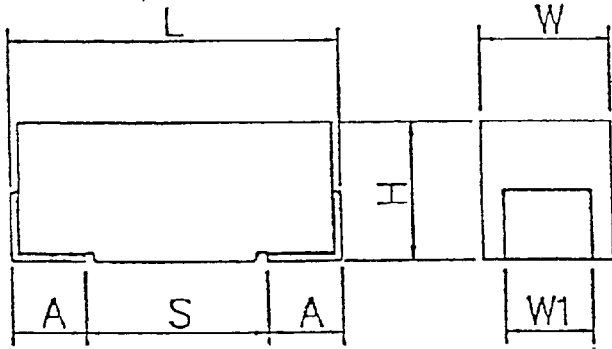
Secretariat Note:

The document was originally drafted by members of CECC WG3 and discussed as document

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by WG3 at their meeting in Milan with the decision to publish it without voting (see minutes CECC WG(Sec)247, item 8.2).

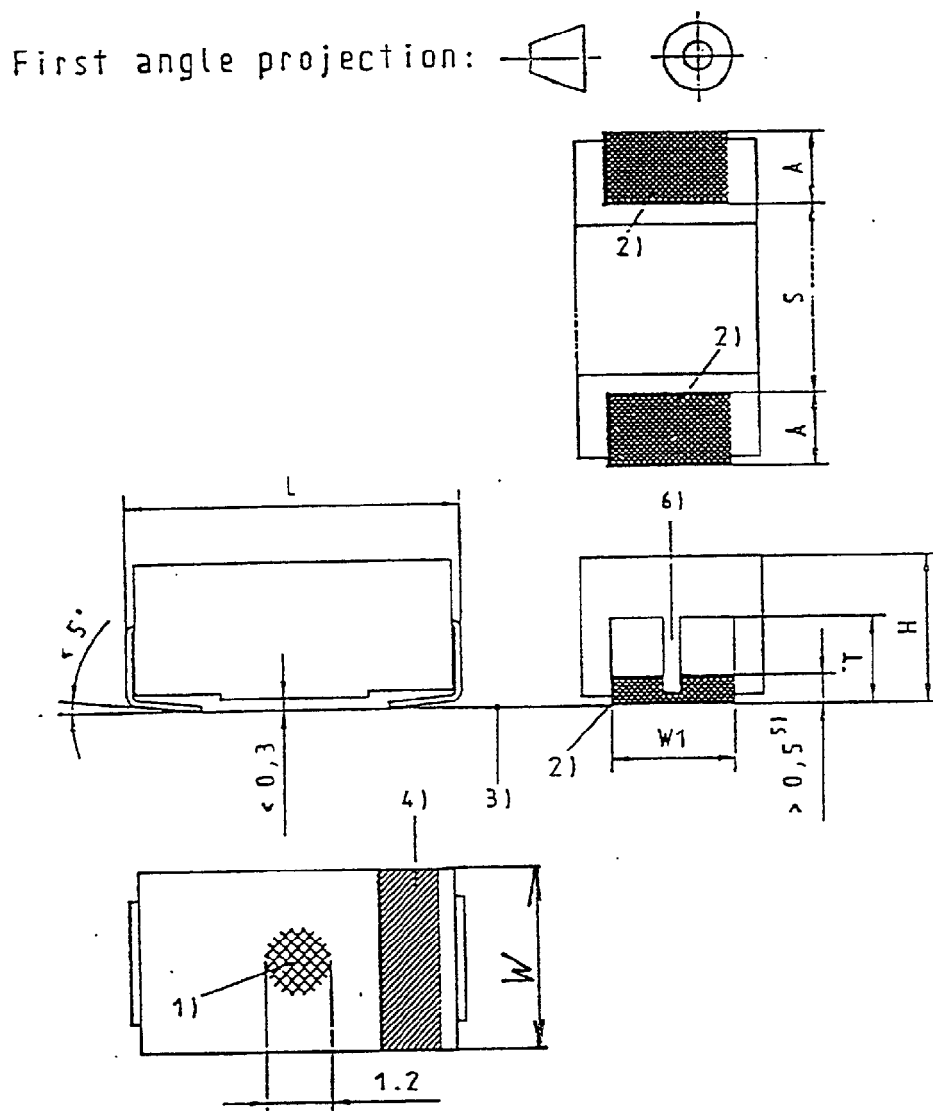
To allow early publication, this detail specification is issued initially in English only. Corresponding versions in French and German will follow on request of ONHs.

HARMONIZED DETAIL SPECIFICATION	CECC 30 801-803
Specification available from: CECC General Secretariat	ISSUE 1 1994
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH: EN 130 000:1993 (CECC 30 800 Issue 2 1990)	MANUFACTURER'S TYPE NUMBERS See CECC 00 200 For ordering information see 1.6
Outline and dimensions First angle projection 	DETAIL SPECIFICATION FOR FIXED TANTALUM SURFACE MOUNTING CAPACITORS WITH SOLID ELECTROLYTE, POROUS ANODE, FUSED
Figure 1 	POLAR SOLID ELECTROLYTE METALLIC TERMINATIONS STYLE I - PROTECTED FOR SURFACE MOUNTING
(Other shapes are permitted within the dimensions given) Marking information: See 1.5 For details see Figure 2 and Table 1	ASSESSMENT LEVEL: E

QUICK REFERENCE DATA:	Rated capacitance range (C_R)	0,22 to 100 μF
	Capacitance tolerance	$\pm 10\%$, $\pm 20\%$
	Rated voltage range (U_R)	4 to 50 V d.c.
	Climatic category	55/125/56
	Performance level	Long life

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).

Figure 2



Notes:

- For detailed dimensions see Table 1
- Dimensions in mm

- 1) Area on upper surface of the capacitor to allow vacuum pick-up
- 2) Area to be examined after solderability test
- 3) Substrate
- 4) Area for polarity mark
- 5) Dimension W_1 applies to the shaded area only
- 6) This notch is an optional feature

1 General data

1.1 Methods of mounting

For normal use the capacitors may be mounted by hand soldering, infrared soldering, wave soldering or condensation soldering.

For tests carried out in accordance with Table 4B Group C3 the mounting shall be in accordance with 4.3 of CECC 30 800 using glass-epoxy FR4 printed board 1,6 mm thick.

1.2 Dimensions

Table 1

Case Size	Dimensions (in mm)						
Reference	L	W	H	W ₁	A	S _{min.}	T _{min.}
B	3,5±0,2	2,8±0,2	1,9±0,2	2,2±0,1	0,8±0,3	1,4	0,7
C	6,0±0,3	3,2±0,3	2,5±0,3	2,2±0,1	1,3±0,3	2,9	1,0
D	7,3±0,3	4,3±0,3	2,8±0,3	2,4±0,1	1,3±0,3	4,1	1,0
E	7,3±0,3	4,3±0,3	4,1±0,3	2,4±0,1	1,3±0,3	4,4	1,0

Notes: Dimension W₁ applies over length T_{min.} and A.

The minimum value specified for S implies that the full ranges of tolerances for L and A may not be simultaneously available.

1.3 Ratings and characteristics

Capacitance range	See Table 2A
Tolerance on rated capacitance	± 10%, ± 20%
Rated voltage	See Table 2A
Category voltage	See Table 2A
Climatic category	55/125/56
Rated temperature	85°C
Variation of capacitance with temperature	See Table 2B
Tangent of loss angle (tan δ)	See Table 2B
Leakage current (μA) max.	See Table 2B
Impedance at 100 kHz and 20°C	See Table 2C
Surge voltage	1,3 U _R or 1,3 U _C as applicable