
:]_gb]_cbXYbnUrcf]nUY_Y_fcbg_c`cdfYa c`!" "XY.`DcXfc bUgdYWZ_UWU.`:]_gb]`
HUbUcj]`YY_fcb`]hg_]_cbXYbnUrcf]`g`fXb]a`YY_fcb`]rca`]n`a`Ub[`Ubcj`Y[`UX]c_g]XU`
nUdcj`f]bg_c`a`cbUjc`f]97`*`\$` ,`(!`.&\$*\$`Ł

Fixed capacitors for use in electronic equipment - Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte (IEC 60384-3:2006)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 3: Rahmenspezifikation: Oberflächenmontierbare Tantal-Kondensatoren mit festem Mangandioxid-Elektrolyt (IEC 60384-3:2006)

Condensateurs fixes utilisés dans les équipements électroniques - Partie 3 : Spécification intermédiaire : Condensateurs fixes électrolytiques au tantale pour montage en surface à électrolyte solide en bioxyde de manganese (IEC 60384-3:2006)

Ta slovenski standard je istoveten z: EN 60384-3:2006

ICS:

31.060.40

SIST EN 60384-3:2008

en,de

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**Fixed capacitors for use in electronic equipment
Part 3: Sectional specification: Surface mount fixed tantalum
electrolytic capacitors with manganese dioxide solid electrolyte
(IEC 60384-3:2006)**

Condensateurs fixes utilisés dans
les équipements électroniques
Partie 3: Spécification intermédiaire:
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Festkondensatoren zur Verwendung
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Teil 3: Rahmenspezifikation:
Oberflächenmontierbare
Tantal-Kondensatoren mit festem
Mangandioxid-Elektrolyt
(IEC 60384-3:2006)

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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.

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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 text of document 40/1771/FDIS, future edition 3 of IEC 60384-3, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60384-3 on 2006-11-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2007-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60384-3:2006 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60062 (mod)	- ¹⁾	Marking codes for resistors and capacitors	EN 60062	2005 ²⁾
IEC 60063	- ¹⁾	Preferred number series for resistors and capacitors	-	-
IEC 60068-1	- ¹⁾	Environmental testing Part 1: General and guidance	EN 60068-1	1994 ²⁾
IEC 60384-1 (mod)	- ¹⁾	Fixed capacitors for use in electronic equipment Part 1: Generic specification	EN 60384-1 + corr. October	2001 ²⁾ 2001
IEC 60410	- ¹⁾	Sampling plans and procedures for inspection - by attributes	-	-
ISO 3	- ¹⁾	Preferred numbers - Series of preferred numbers	-	-

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL STANDARD

IEC 60384-3

QC 300800

Third edition
2006-10

Fixed capacitors for use in electronic equipment –

Part 3:

Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60384-3 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This third edition cancels and replaces the second edition published in 1989 and constitutes a minor revision related to tables, figures and references.

The text of this standard is based on the following documents:

FDIS	Report on voting
40/1771/FDIS	40/1789/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The QC numbers that appear on the front cover of this publication are the specification numbers in the IEC Quality Assessment System for Electronic Components (IECQ).

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The list of all the parts of the IEC 60384 series, under the (new) general title *Fixed capacitors for use in electronic equipment*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

A bilingual version of this publication may be issued at a later date.

The contents of the corrigendum of January 2007 have been included in this copy.

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte

1 General

1.1 Scope

This specification applies to surface mount tantalum solid electrolyte capacitors. These capacitors are primarily intended to be mounted directly onto substrates for hybrid circuits or onto printed boards.

The following two styles are considered:

- Style 1: protected capacitors;
- Style 2: unprotected capacitors.

1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC 60384-1:1999, the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor.

1.3 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 60062, *Marking codes for resistors and capacitors*

IEC 60063, *Preferred number series for resistors and capacitors*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60384-1, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60410, *Sampling plans and procedures for inspection by attributes*

ISO 3, *Preferred numbers – Series of preferred numbers*

1.4 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.