

STN	Nepremenné kondenzátory na použitie v elektronických zariadeniach Časť 24: Rámcová špecifikácia Nepremenné tantalové elektrolytické kondenzátory s tuhým elektrolytom z vodivého polyméru na povrchovú montáž	STN EN IEC 60384-24 35 8295
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Fixed capacitors for use in electronic equipment - Part 24: Sectional specification - Fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/21

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EN IEC 60384-24

September 2021

ICS 31.060.40; 31.060.50

Supersedes EN 60384-24:2015 and all of its
amendments and corrigenda (if any)

English Version

**Fixed capacitors for use in electronic equipment - Part 24:
 Sectional specification - Fixed tantalum electrolytic surface
 mount capacitors with conductive polymer solid electrolyte
 (IEC 60384-24:2021)**

Condensateurs fixes utilisés dans les équipements
 électroniques - Partie 24: Spécification intermédiaire -
 Condensateurs fixes électrolytiques au tantalum pour
 montage en surface à électrolyte solide en polymère
 conducteur
 (IEC 60384-24:2021)

Festkondensatoren zur Verwendung in Geräten der
 Elektronik - Teil 24: Rahmenspezifikation -
 Oberflächenmontierbare Tantal-Elektrolyt-Kondensatoren
 mit leitfähigem Polymerfestkörper-Elektrolyten
 (IEC 60384-24:2021)

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 Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60384-24:2021 (E)**European foreword**

The text of document 40/2849/FDIS, future edition 3 of IEC 60384-24, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60384-24:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-05-18
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-08-18

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2-58:2015 NOTE Harmonized as EN 60068-2-58:2015 (not modified)

IEC 60384-3 NOTE Harmonized as EN 60384-3

Annex ZA
(normative)**Normative references to international publications
with their corresponding European publications**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60063	-	Preferred number series for resistors and capacitors	EN 60063	-
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60384-1	2016	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2016
IEC 61193-2	2007	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	2007



IEC 60384-24

Edition 3.0 2021-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fixed capacitors for use in electronic equipment –
Part 24: Sectional specification – Fixed tantalum electrolytic surface mount
capacitors with conductive polymer solid electrolyte**

**Condensateurs fixes utilisés dans les équipements électroniques –
Partie 24: Spécification intermédiaire – Condensateurs fixes électrolytiques
au tantalum pour montage en surface à électrolyte solide en polymère conducteur**





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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fixed capacitors for use in electronic equipment –
Part 24: Sectional specification – Fixed tantalum electrolytic surface mount
capacitors with conductive polymer solid electrolyte**

**Condensateurs fixes utilisés dans les équipements électroniques –
Partie 24: Spécification intermédiaire – Condensateurs fixes électrolytiques
au tantalum pour montage en surface à électrolyte solide en polymère conducteur**

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 24: Sectional specification – Fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte****FOREWORD**

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International Standard IEC 60384-24 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 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Revision of the structure in accordance with ISO/IEC Directives, Part 2:2018, to the extent practicable, and harmonization between other similar kinds of documents.
- b) In addition, Clause 5 and all the tables have been reviewed in order to prevent duplications and contradictions.

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

FDIS	Report on voting
40/2849/FDIS	40/2860/RVD

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

The language used for the development of this International Standard is English.

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

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at <http://www.iec.ch/standardsdev/publications>.

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 24: Sectional specification – Fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte

1 Scope

This part of IEC 60384 applies to fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte, which are primarily intended for DC applications for use in electronic equipment.

Fixed tantalum electrolytic surface mount capacitors with solid (MnO_2) electrolyte are not included but are covered by IEC 60384-3.

These capacitors are primarily intended for use in electronic equipment to be mounted directly on substrates for hybrid circuits or to printed boards.

Capacitors for special-purpose applications can need additional requirements.

The object of this document is to prescribe preferred ratings and characteristics and to select from IEC 60384-1:2016 the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60063, *Preferred number series for resistors and capacitors*

IEC 60068-1:2013, *Environmental testing – Part 1: General and guidance*

IEC 60384-1:2016, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 61193-2:2007, *Quality assessment systems – Part 2: Selection and use of sampling plans for inspection of electronic components and packages*

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