
Nespremenljivi kondenzatorji za elektronsko opremo - 25-1. del: Okvirna podrobna specifikacija - Nespremenljivi aluminijevi elektrolitski kondenzatorji s prevodnim polimernim trdim elektrolitom za površinsko montažo - Ocenjevalni nivo EZ (IEC 60384-25-1:2006)

Fixed capacitors for use in electronic equipment -- Part 25-1: Blank detail specification - Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte - Assessment level EZ

iTeh STANDARD PREVIEW

Festkondensatoren zur Verwendung in Geräten der Elektronik -- Teil 25-1: Vordruck für Bauartspezifikation - Oberflächenmontierbare Aluminium-Elektrolyt-Kondensatoren mit leitfähigem Polymerfestkörper-Elektrolyten - Bewertungsstufe EZ

<https://standards.itih.ai/catalog/standards/sist/c3627750-651f-4881-96b-c4f38be10879/sist-en-60384-25-1-2007>

Condensateurs fixes utilisés dans les équipements électroniques -- Partie 25-1: Spécification particulière cadre - Condensateurs fixes électrolytiques en aluminium pour montage en surface à électrolyte solide en polymère conducteur - Niveau d'assurance de la qualité EZ

Ta slovenski standard je istoveten z: EN 60384-25-1:2006

ICS:

| | | |
|-----------|--|-----------------------------------|
| 31.060.50 | Aluminijski elektrolitni kondenzatorji | Aluminium electrolytic capacitors |
|-----------|--|-----------------------------------|

SIST EN 60384-25-1:2007

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60384-25-1

August 2006

ICS 31.060.40; 31.060.50

English version

**Fixed capacitors for use in electronic equipment
Part 25-1: Blank detail specification –
Surface mount fixed aluminium electrolytic capacitors
with conductive polymer solid electrolyte –
Assessment level EZ
(IEC 60384-25-1:2006)**

Condensateurs fixes utilisés dans
les équipements électroniques
Partie 25-1: Spécification particulière
cadre –

Condensateurs fixes électrolytiques
en aluminium pour montage en surface
à électrolyte solide en polymère
conducteur –

Niveau d'assurance de la qualité EZ
(CEI 60384-25-1:2006)

Festkondensatoren zur Verwendung
in Geräten der Elektronik
Teil 25-1: Vordruck für
Bauartspezifikation –

Oberflächenmontierbare
Aluminium-Elektrolyt-Kondensatoren
mit leitfähigem Polymerfestkörper-
Elektrolyten –

Bewertungsstufe EZ
(IEC 60384-25-1:2006)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

This European Standard was approved by CENELEC on 2006-07-01. 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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 40/1734/FDIS, future edition 1 of IEC 60384-25-1, 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 60384-25-1 on 2006-07-01.

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) 2007-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60384-25-1:2006 was approved by CENELEC as a European Standard without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

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 60384-1 (mod) | 1999 | Fixed capacitors for use in electronic equipment Part 1: Generic specification | EN 60384-1 + corr. October | 2001 2001 |
| IEC 60384-25 | - ¹⁾ | Fixed capacitors for use in electronic equipment Part 25: Sectional specification: Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte | EN 60384-25 | 2006 ²⁾ |

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

INTERNATIONAL STANDARD

IEC 60384-25-1

First edition
2006-06

Fixed capacitors for use in electronic equipment –

Part 25-1:

Blank detail specification –

Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte – Assessment level EZ

ITC'S STANDARD REVIEW
(standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

© IEC 2006 — Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

N

For price, see current catalogue

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 25-1: Blank detail specification – Surface mount fixed aluminum electrolytic capacitors with conductive polymer solid electrolyte – Assessment level EZ**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 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 60384-25-1 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

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

| FDIS | Report on voting |
|--------------|------------------|
| 40/1734/FDIS | 40/1757/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.

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

IEC 60384 consists of the following parts, under the general title *Fixed capacitors for use in electronic equipment*:

- Part 1: Generic specification
- Part 2: Sectional specification: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors
- Part 3: Sectional specification: Fixed tantalum chip capacitors
- Part 4: Sectional specification: Aluminium electrolytic capacitors with solid and non-solid electrolyte
- Part 5: Sectional specification: Fixed mica dielectric d.c. capacitors with a rated voltage not exceeding 3 000 V – Selection of methods of test and general requirements
- Part 6: Sectional specification: Fixed metallized polycarbonate film dielectric d.c. capacitors
- Part 7: Sectional specification: Fixed polystyrene film dielectric metal foil d.c. capacitors
- Part 8: Sectional specification: Fixed capacitors of ceramic dielectric, Class 1
- Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2
- Part 11: Sectional specification: Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors
- Part 12: Sectional specification: Fixed polycarbonate film dielectric metal foil d.c. capacitors
- Part 13: Sectional specification: Fixed polypropylene film dielectric metal foil d.c. capacitors
- Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains
- Part 15: Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte
- Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors
- Part 17: Sectional specification: Fixed metallized polypropylene film dielectric a.c. and pulse capacitors
- Part 18: Sectional specification: Fixed aluminium electrolytic chip capacitors with solid and non-solid electrolyte
- Part 19: Sectional specification: Fixed metallized polyethylene-terephthalate film dielectric chip d.c. capacitors
- Part 20: Sectional specification: Fixed metallized polyphenylene sulphide film dielectric chip d.c. capacitors
- Part 21: Sectional specification: Fixed surface mount multilayer capacitors of ceramic dielectric, Class 1
- Part 22: Sectional specification: Fixed surface mount multilayer capacitors of ceramic dielectric, Class 2
- Part 23: Sectional specification: Fixed surface mount metallized polyethylene naphthalate film dielectric d.c. capacitors
- Part 24: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with conductive polymer solid electrolyte
- Part 25: Sectional specification: Surface mount fixed aluminium electrolyte capacitors with conductive polymer solid electrolyte

All sectional specifications mentioned above do have one or more blank detail specifications being a supplementary document, containing requirements for style, layout and minimum content of detail specifications.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 60384-25-1:2007](https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007)

<https://standards.iteh.ai/catalog/standards/sist/c3627750-651f-4881-96fb-c4f38be10879/sist-en-60384-25-1-2007>

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 25-1: Blank detail specification – Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte – Assessment level EZ

Blank detail specification

A blank detail specification is a supplementary document to the sectional specification and contains requirements for style, layout and minimum content of detail specifications. Detail specifications not complying with these requirements may not be considered as being in accordance with IEC specifications nor shall they so be described.

In the preparation of detail specifications the content of 1.4 of the sectional specification shall be taken into account.

The numbers between square brackets on the first page of the detail specification correspond to the following information, which shall be inserted in the position indicated.

Identification of the detail specification

- [1] The "International Electrotechnical Commission" or the National Standards Organization under whose authority the detail specification is drafted.
- [2] The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- [3] The number and issue number of the IEC or national generic specification.
- [4] The IEC number of the blank detail specification.

Identification of the capacitor

- [5] A short description of the type of capacitor.
- [6] Information on typical construction (when applicable).
- [7] Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an annex to the detail specification.
- [8] Application or group of applications covered and/or assessment level.
- [9] Reference data on the most important properties, to allow comparison between the various capacitor types.