
**Nespremenljivi kondenzatorji za uporabo v elektronski opremi – 6. del:
Področna specifikacija – Nespremenljivi kondenzatorji z dielektrikom iz
metalizirane polikarbonatne folije za enosmerne napetosti (IEC 60384-6:2005)**

Fixed capacitors for use in electronic equipment – Part 6: Sectional specification –
Fixed metallized polycarbonate film dielectric d.c. capacitors (IEC 60384-6:2005)

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EUROPEAN STANDARD

EN 60384-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2005

ICS 31.060.30

Supersedes EN 130500:1998

English version

**Fixed capacitors for use in electronic equipment
Part 6: Sectional specification –
Fixed metallized polycarbonate film dielectric d.c. capacitors
(IEC 60384-6:2005)**

Condensateurs fixes utilisés
dans les équipements électroniques
Partie 6: Spécification intermédiaire –
Condensateurs fixes pour courant continu
à diélectrique en film de polycarbonate
métallisé
(CEI 60384-6:2005)

Festkondensatoren zur Verwendung
in Geräten der Elektronik
Teil 6: Rahmenspezifikation –
Festkondensatoren für Gleichspannung
mit metallisierten Kunststofffolien aus
Polykarbonat als Dielektrikum
(IEC 60384-6:2005)

This European Standard was approved by CENELEC on 2005-10-01. 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.

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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 40/1588/FDIS, future edition 3 of IEC 60384-6, 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 60384-6 on 2005-10-01.

This European Standard supersedes EN 130500:1998.

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) 2006-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60384-6:2005 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 Where 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 60063	1963	Preferred number series for resistors and capacitors	-	-
A1	1967		-	-
A2	1977		-	-
IEC 60068-1	- ¹⁾	Environmental testing Part 1: General and guidance	EN 60068-1	1994 ²⁾
IEC 60384-1 (mod)	1999	Fixed capacitors for use in electronic equipment Part 1: Generic specification	EN 60384-1 + corr. October	2001 2001
IEC 60384-6-1	- ¹⁾	Part 6-1: Blank detail specification - Fixed metallized polycarbonate film dielectric d.c. capacitors - Assessment level E	EN 60384-6-1	2005 ²⁾
IEC 60384-14	- ¹⁾	Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 60384-14	2005 ²⁾
IEC QC 001005	- ¹⁾	IEC Quality assessment system for electronic components (IECQ) - Register of films, products and services approved under the IECQ system, including ISO 9000	-	-
ISO 3	1973	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 60384-6

QC 300500

Third edition
2005-09

Fixed capacitors for use in electronic equipment –

Part 6: Sectional specification – Fixed metallized polycarbonate film dielectric d.c. capacitors

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International Electrotechnical Commission
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PRICE CODE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 6: Sectional specification –
Fixed metallized polycarbonate film dielectric d.c. capacitors**

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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International Standard IEC 60384-6 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 1987 and amendment 1 (1992) 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
40/1588/FDIS	40/1608/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.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

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 8: Sectional specification: Fixed capacitors of ceramic dielectric, Class 1
- Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2
- Part 11: Blank detail specification: Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors – Assessment level E
- 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 sulfide 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

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 standard may be issued at a later date.

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 6: Sectional specification – Fixed metallized polycarbonate film dielectric d.c. capacitors

1 General

1.1 Scope

This part of IEC 60384 applies to fixed capacitors for direct current with metallized electrodes and polycarbonate dielectric for use in electronic equipment.

These capacitors may have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the a.c. component is small with respect to the rated voltage. Two performance grades of capacitors are covered, Grade 1 for long-life application and Grade 2 for general application.

Capacitors for electromagnetic interference and connection to the supply mains are not included but are covered by IEC 60384-14.

1.2 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 60063:1963, *Preferred number series for resistors and capacitors*
Amendment 1 (1967)
Amendment 2 (1977)

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

IEC 60384-1:1999, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60384-6-1, *Fixed capacitors for use in electronic equipment – Part 6-1: Blank detail specification – Fixed metallized polycarbonate film dielectric d.c. capacitors -- Assessment level E*

IEC 60384-14: *Fixed capacitors for use in electronic equipment – Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*

IEC QC 001005: *Register of Firms, Products and Services approved under the IECQ system, including ISO 9000*

ISO 3:1973, *Preferred numbers – Series of preferred numbers*