

STN	Nepremenné kondenzátory na použitie v elektronických zariadeniach Časť 23: Rámcová špecifikácia Nepremenné kondenzátory s dielektrikom z pokovovanej polyetylénnaftalátovej fólie určené na jednosmerné napätie	STN EN IEC 60384-23 35 8291
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Fixed capacitors for use in electronic equipment - Part 23: Sectional specification - Fixed metallized polyethylene naphthalate film dielectric surface mount DC capacitors

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. 05/23

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NORME EUROPÉENNE
EUROPÄISCHE NORM

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English Version

Fixed capacitors for use in electronic equipment - Part 23: Sectional specification - Fixed metallized polyethylene naphthalate film dielectric surface mount DC capacitors (IEC 60384-23:2023)

Condensateurs fixes utilisés dans les équipements
électroniques - Partie 23: Spécification intermédiaire -
Condensateurs fixes pour montage en surface pour courant
continu à diélectrique en film de polynaphtalate d'éthylène
métallisé
(IEC 60384-23:2023)

Festkondensatoren zur Verwendung in Geräten der
Elektronik - Teil 23: Rahmenspezifikation -
Oberflächenmontierbare Festkondensatoren für
Gleichspannung mit metallisierter Polyethylen-Naphtalat-
Folie als Dielektrikum
(IEC 60384-23:2023)

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EN IEC 60384-23:2023 (E)**European foreword**

The text of document 40/2983/FDIS, future edition 3 of IEC 60384-23, 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 60384-23:2023.

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) 2023-12-10
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IEC 60384-14 NOTE Approved as EN 60384-14



IEC 60384-23

Edition 3.0 2023-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fixed capacitors for use in electronic equipment –
Part 23: Sectional specification – Fixed metallized polyethylene naphthalate film
dielectric surface mount DC capacitors**

**Condensateurs fixes utilisés dans les équipements électroniques –
Partie 23: Spécification intermédiaire – Condensateurs fixes pour montage en
surface pour courant continu à diélectrique en film de polynaphtalate d'éthylène
métallisé**



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IEC 60384-23

Edition 3.0 2023-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fixed capacitors for use in electronic equipment –
Part 23: Sectional specification – Fixed metallized polyethylene naphthalate film
dielectric surface mount DC capacitors**

**Condensateurs fixes utilisés dans les équipements électroniques –
Partie 23: Spécification intermédiaire – Condensateurs fixes pour montage en
surface pour courant continu à diélectrique en film de polynaphtalate d'éthylène
métallisé**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 23: Sectional specification –
Fixed metallized polyethylene naphthalate film
dielectric surface mount DC capacitors**

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IEC 60384-23 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

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) this edition includes the following significant technical changes with respect to the previous edition: revision of all parts of the document based on the ISO/IEC Directives, Part 2:2021, and harmonization with other similar kinds of documents;
- b) the document structure has been organized to follow new sectional specification structure decided in TC 40;
- c) revised tables and Clause 5 so as to prevent duplications and contradictions;

- d) in Subclause 5.2 (Mounting), the Subclauses 5.2.1, 5.2.2 and 5.2.3 have been added;
- e) in Subclause 5.5 (Shear test), the Subclauses 5.5.1 and 5.5.2 have been added;
- f) in Subclause 5.14 (Component solvent resistance), the Subclauses 5.14.1 and 5.14.2 have been added. In Table 8 and Table A.2, test 5.14 has been moved before 5.7.5 (Final inspections and requirements) in Group 1A and in Subgroup C1;
- g) In Subclause 5.15 (Solvent resistance of marking), the Subclauses 5.15.1 and 5.15.2 have been added;
- h) tangent of loss angle measurement has been added to the resistance to soldering heat test;
- i) lot-by-lot and periodical inspection tables including requirements have been moved to Annex A;
- j) revised Inspection Level (IL) of A1 subgroup.

The text of this International Standard is based on the following documents:

Draft	Report on voting
40/2983/FDIS	40/3019/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.

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

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 www.iec.ch/publications.

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 23: Sectional specification – Fixed metallized polyethylene naphthalate film dielectric surface mount DC capacitors

1 Scope

This part of IEC 60384 is applicable to fixed surface mount capacitors for direct current, with metallized electrodes and polyethylene naphthalate dielectric for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted directly onto printed boards or onto substrates for hybrid circuits. These capacitors can have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the AC component is small with respect to the rated voltage.

This part of IEC 60384 specifies preferred ratings and characteristics, selects from IEC 60384-1:2021 the appropriate quality assessment procedures, tests and measuring methods and gives general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this sectional specification are of an equal or higher performance level. Lower performance levels are not permitted.

Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.

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 60062, *Marking codes for resistors and capacitors*

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

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

IEC 60384-1:2021, *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*

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

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