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Fixed capacitors for use in electronic equipment - Part 8: Sectional specification - Fixed capacitors of ceramic dielectric, Class 1

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ICS 31.060.20

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60384-8

September 2024

ICS 31.060.20

Supersedes EN 60384-8:2015;
EN 60384-8:2015/AC:2017-09

English Version

Fixed capacitors for use in electronic equipment - Part 8: Sectional specification - Fixed capacitors of ceramic dielectric, Class 1 (IEC 60384-8:2024)

Condensateurs fixes utilisés dans les équipements électroniques - Partie 8: Spécification intermédiaire - Condensateurs fixes à diélectrique en céramique, Classe 1
(IEC 60384-8:2024)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 8: Rahmenspezifikation - Keramik-Festkondensatoren, Klasse 1
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European foreword

The text of document 40/3144/FDIS, future edition 5 of IEC 60384-8, prepared by TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60384-8:2024.

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)	2025-06-18
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2027-09-18

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IEC 60063	NOTE Approved as EN 60063
IEC 60068-1:2013	NOTE Approved as EN 60068-1:2014 (not modified)
IEC 60384-8-1:2005	NOTE Approved as EN 60384-8-1:2005 (not modified)
IEC 60384-14	NOTE Approved as EN IEC 60384-14
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IEC 60384-8

Edition 5.0 2024-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Fixed capacitors for use in electronic equipment – Part 8: Sectional specification – Fixed capacitors of ceramic dielectric, Class 1

Condensateurs fixes utilisés dans les équipements électroniques – Partie 8: Spécification intermédiaire – Condensateurs fixes à diélectrique en céramique, Classe 1

IEC 60384-8:2024-08(en-fr)

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IEC 60384-8

Edition 5.0 2024-08

INTERNATIONAL STANDARD

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTENTS

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 8: Sectional specification – Fixed capacitors of ceramic dielectric, Class 1

FOREWORD

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IEC 60384-8 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This fifth edition cancels and replaces the fourth 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) The document has been completely restructured to comply with ISO/IEC Directives, Part 2 and to make it more useable; tables, figures and references have been revised accordingly. Annex X contains all cross-references of changes in clause/subclause numbers.
b) The terms have been replaced by the letter symbols in Table 3.

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c) Code of temperature coefficient and tolerance of C0G, U2J have been added in Table 4, Table 6, Table 8, Table 9, Table 11, Table 13, Table 16 and Annex B.

d) Annex B has been changed from informative to normative.

e) Clause C.5 (Test schedule for quality conformance inspection) has been newly added to withdraw the blank detail specification: IEC 60384-8-1.

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

Draft	Report on voting
40/3144/FDIS	40/3161/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.

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.

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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 8: Sectional specification – Fixed capacitors of ceramic dielectric, Class 1

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1 Scope

This part of IEC 60384 is applicable to fixed capacitors of ceramic dielectric with a defined temperature coefficient (dielectric Class 1), intended for use in electronic equipment, including leadless capacitors but excluding fixed surface mount multilayer capacitors of ceramic dielectric, which are covered by IEC 60384-21 (Class 1).

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

The object of this document is to specify preferred ratings and characteristics and to select from IEC 60384-1:2021, the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this document provide specific test severities and requirements of an equal or higher performance level. Further information on the conception of generic, sectional and detail specifications can be found in the Introduction of IEC 60384-1:2021.

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 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*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60384-1 and the following apply.

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