

BS EN 60384-20:2015



BSI Standards Publication

Fixed capacitors for use in electronic equipment

Part 20: Sectional specification — Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors

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National foreword

This British Standard is the UK implementation of EN 60384-20:2015. It is identical to IEC 60384-20:2015. It supersedes BS EN 60384-20:2008 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/40X, Capacitors and resistors for electronic equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Published by BSI Standards Limited 2015

ISBN 978 0 580 78450 7

ICS 31.060.10

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2015.

Amendments/corrigenda issued since publication

Date	Text affected
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EUROPEAN STANDARD

EN 60384-20

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

ICS 31.060.10

Supersedes EN 60384-20:2008

English Version

**Fixed capacitors for use in electronic equipment - Part 20:
Sectional specification - Fixed metallized polyphenylene sulfide
film dielectric surface mount d.c. capacitors
(IEC 60384-20:2015)**

Condensateurs fixes utilisés dans les équipements
électroniques - Partie 20: Spécification intermédiaire -
Condensateurs fixes pour montage en surface pour courant
continu à diélectrique en film de sulfure de polyphénylène
métallisé
(IEC 60384-20:2015)

Festkondensatoren zur Verwendung in Geräten der
Elektronik - Teil 20: Rahmenspezifikation -
Oberflächenmontierbare Festkondensatoren für
Gleichspannung mit metallisierter Polyphenyl-Sulfid-Folie
als Dielektrikum
(IEC 60384-20:2015)

This European Standard was approved by CENELEC on 2015-08-26. 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.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European Foreword

The text of document 40/2381/FDIS, future edition 3 of IEC 60384-20, 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 60384-20:2015.

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) 2016-05-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-08-26

This document supersedes EN 60384-20:2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60384-20:2015 was approved by CENELEC as a European Standard without any modification.

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

IEC 60384-14

NOTE Harmonized as EN 60384-14.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60062	2004	Marking codes for resistors and capacitors	EN 60062	2005
-	-		+ corrigendum Jan.	2007
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	2008	Fixed capacitors for use in electronic equipment -- Part 1: Generic specification	EN 60384-1	2009
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
ISO 3	-	Preferred numbers; Series of preferred numbers	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 20: Sectional specification – Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors**

FOREWORD

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International Standard IEC 60384-20 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 2008, and 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 2:2011 (sixth edition) to the extent practicable, and harmonization between other similar kinds of documents.
- b) In addition, Clause 4 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
40/2381/FDIS	40/2394/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.

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 publication will remain unchanged until the stability date indicated on the IEC website 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.

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 20: Sectional specification – Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors

1 General

1.1 Scope

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

These capacitors are divided to 3 grades. Performance grade 1 for long life, performance grade 2 for general purpose and performance grade 3 for miniature type.

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

Capacitors used for motor or fluorescent lamp are outside the scope of this standard.

1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC 60384-1, the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor. Test severities and requirements prescribed in detail specifications referring to this standard shall be of equal or higher performance level, lower performance levels are not permitted.

1.3 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60062:2004, *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 60384-1:2008, *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*