Doc No. : LITD 05 (23256) Draft IS/IEC 60384-2: 2021 [Superseding IS 9256 (Part 1): 2019] August 2023

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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मसौदा भारतीय मानक

इलेक्ट्रॉनिक उपस्कर में उपभोग के लिए जड़ित प्रतिरोधक-भाग 2: अनुभागीय विशिष्टता - फिक्स्ड मेटालाइज्ड पॉलीइथाइलीन टेरेफ्थेलेट फिल्म पैरावैद्रयुत डीसी कैपेसिटर

Draft Indian Standard

Fixed Capacitors for use in Electronic Equipment – Part 2: Sectional Specification -Fixed Metallized Polyethylene Terephthalate Film Dielectric DC Capacitors

ICS 31.060.30

LITD 05-Semiconductor and other Electronic Components and Devices Sectional Committee

NATIONAL FOREWORD

(Formal clauses will be added later)

This Draft Indian Standard (Part 2) which is identical with IEC 60384-2:2021 'Fixed capacitors for use in electronic equipment - Part 2: Sectional specification - Fixed metallized polyethylene terephthalate film dielectric DC capacitors 'issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of the Semiconductor and other Electronic Components and Devices Sectional Committee (LITD 05) and approval of the Electronics and Information Technology Division Council.

IS 9256 was first published in 1979 and was equivalent to IEC 60384-2. The first revision of IS 9256 was published to align it with the latest version of IEC 60384-2: 2011. This superseding of Standard is being done to align it with the latest version of IEC 60384-2: 2021. On publication of this Indian Standard (Part 2), IS 9256 (Part 1):2019 stands withdrawn.

This standard (Part 2) is one of the parts of a series of standards on 'Fixed capacitors for use in electronic equipment'. The other parts in this series are:

Part 1: Generic specification

Part 3: Surface mount fixed tantalum electrolytic capacitors with solid (MnO₂) electrolyte

Part 4: Fixed aluminium electrolytic capacitors with solid (MnO₂) and non-solid electrolyte

Part 8: Sectional specification: Fixed capacitors of ceramic dielectric, Class 1 Part 9: Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2

Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2

Part 14: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains

The text of IEC Standard may be approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International standards	Corresponding Indian standards	Degree of Equivalence
IEC 60063:2015 Preferred	IS 824 : 2021 Preferred number	Identical
number series for resistors and	series for Resistors and Capacitors	
capacitors		
IEC 60068-1:2013	IS/IEC 60068-1 : 2013	Identical
Environmental testing – Part 1:	Environmental Testing Part 1	
General and guidance	General and Guidance	
IEC 60384-1:2016 Fixed	IS 7305: 2018 Fixed capacitors for	Identical with
capacitors for use in electronic	use in electronic equipment – Part 1:	IEC 60384-1:2021
equipment – Part 1: Generic	Generic Specification (It will be	
specification	superseded by IS/IEC 60384-1:2021	
-	which is under Development)	

ISO 3:1973 Preferred	IS 1076 (Part 1) : 1985	Identical with
numbers – Series of preferred	Preferred numbers: Part 1 series of	ISO 3 : 1973
numbers	preferred numbers (Second	
	Revision)	

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Title
IEC 61193-2:2007	Quality assessment systems – Part 2: Selection and use of sampling plans for inspection of electronic components and packages

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*Second Revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

SCOPE OF IEC 60384-2:2021

"This part of IEC 60384 applies to fixed capacitors for direct current, with metallized electrodes and polyethylene-terephthalate dielectric for use in electronic equipment.

These capacitors have a possibility of "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. Two performance grades of capacitors are covered: grade 1 for long-life application and grade 2 for general application.

Capacitors for electromagnetic interference suppression and surface mount fixed metallized polyethylene-terephthalate film dielectric DC capacitors are not included, but are covered by IEC 60384-14 and IEC 60384-19, respectively.

The object of this document 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 sectional specification are of equal or higher performance level, because lower performance levels are not permitted."

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Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details please refer to IEC 60384-2:2021 or kindly contact.

Head,

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