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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46822.1-2025

**Fixed electric double-layer capacitors for use in electric and
electronic equipment - Part 1: Generic specification**

电气和电子设备用固定双电层电容器 第1部分：总规范

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 1 of GB/T 46822 "Fixed Double-Layer Capacitors for Electrical and Electronic Equipment". GB/T 46822 has been issued.

The following parts were laid out.

---Part 1: General Specifications;

---Part 2: Standard Power Double-Layer Capacitors.

This document is equivalent to IEC 62391-1:2022 "Fixed double-layer capacitors for electrical and electronic equipment - Part 1: General specification".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Standardization of Resistor and Capacitor Components for Electronic Equipment (SAC/TC165).

Introduction

Electric double-layer capacitors are currently widely used in related electrical and electronic equipment, and their market and application areas are booming.

Rapid growth is underway. The series of documents aims to provide unified testing standards for the research, development, and production of double-layer capacitors, and for their inspection.

Ensuring product quality and reliability plays a fundamental and supporting role in the cultivation of emerging industries, and promotes the domestic double-layer capacitor industry and market.

Rapid and healthy development.

The IEC 62391 series of documents for fixed double-layer capacitors for electrical and electronic equipment are written in different parts to maintain...

In accordance with the IEC standard writing method, different parts need to be written separately during the compilation process.

GB/T 46822 "Fixed Double-Layer Capacitors for Electrical and Electronic Equipment" consists of a general specification, sub-specifications, blank detailed specifications, and detailed specifications.

The hierarchical system is currently proposed to consist of the following documents.

---Part 1: General Specifications. The purpose is to determine the majority of common specifications for fixed double-layer capacitors used in electrical and electronic equipment.

All items, terminology, inspection procedures, and test methods.

---Part 2: Sub-specifications for Power Double-Layer Capacitors. Sub-specifications are lower-level specifications than the overall specifications, and their purpose is to determine

the requirements for individual...

The specific conditions or parameter characteristics of fixed double-layer capacitors specified in this item, for particular categories or models, are selected from the general specification.

The quality assessment procedures, testing and measurement methods, and supplementary details, as well as general performance requirements, are provided. These items are typically dimensions.

Priority values for properties, additional test methods and relevant provisions for test methods given in the general specification, sampling and specimen preparation requirements.

The requirements and recommendations for test severity levels and priority acceptance criteria are specified. The sub-specification also defines the test summary tables used in the detailed specifications.

Structure and scope.

---Part 2-1. Blank Detailed Specification for the Evaluation Level (EZ) of Power Double-Layer Capacitors. The purpose is to determine the required individual specifications.

Detailed specifications, formatting, and minimum content requirements for specific categories or models of fixed double-layer capacitors, providing a basis for regulations.

The drafter provides a guideline for creating detailed specifications that conform to the requirements of the general specification or sub-specification, ensuring consistency in the detailed specifications.

Regulation.

---Detailed Specifications. The purpose is to determine all the information needed to define a given model and range of fixed electric double-layer capacitors, including...

Requirements for all specifications, dimensions, and characteristic values are also provided, along with guidelines for fixing the double-layer capacitor coverage within a suitable quality assessment system.

All information required for quality assessment of the number and scope, including the test severity level and acceptance criteria requirements for all applications, and A complete list of tests. Detailed specifications include those within the national standards system, as well as those related to it.

Industry standards, or standards developed by manufacturers or users.

Fixed double-layer capacitors for electrical and electronic equipment Part 1: General Specifications