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

GB/T 44069.6-2026

Replacing GB/T 9634.3-2002

**Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 6: ETD-cores for use in power
supplies**

铁氧体磁心 尺寸和表面缺陷极限导则 第6部分：电源用ETD型磁心
(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 6 of GB/T 44069, "Limits and Limits for Dimensions and Surface Defects of Ferrite Cores". GB/T 44069 has been...

The following sections were published.

---Part 4: RM type magnetic core;

---Part 5: EP type magnetic cores and accessories for inductors and transformers;

---Part 6: ETD type magnetic cores for power supplies;

---Part 13: PQ Type Magnetic Core;

---Part 14: EFD type magnetic core.

This document supersedes GB/T 9634.3-2002 "Guidelines for Limits of Surface Defects in Ferrite Cores Part 3: ETD and E-shaped Cores".

Compared with GB/T 9634.3-2002, the main technical changes of the ETD-shaped magnetic core are as follows, apart from structural adjustments and editorial modifications.

a) Increased the important dimensions related to mechanical interchangeability of the preferred series ETD type magnetic cores made of ferrite, and together with the magnetic core...

The basic dimensions of the coil frame used and the effective parameter values used to calculate this type of magnetic core (see Chapter 4);

b) Added identification for finished components (see Chapter 5);

c) Added the installation of ETD type magnetic cores (see Chapter 6);

d) Increased the defect limits for crystal spots and pores (see 7.7, 7.8);

This document is equivalent to IEC 63093-6:2018 "Limits and limits for dimensions and surface defects of ferrite cores - Part 6: Power supplies".

ETD type magnetic core.

The following minimal editorial changes have been made to this document.

---Notes have been added to Table 5.

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 Magnetic Components and Ferrite Materials (SAC/TC89).

Introduction

Cracks, flash, and sticking. The tolerance for these surface defects depends primarily on the type, location, and size of the defect, as well as the structure of the magnetic core.

GB/T 44069, "Guidelines for Limits of Dimensions and Surface Defects in Ferrite Cores," mainly specifies the limits for core series (such as RM type cores, pot-shaped cores, etc.).

The limits of size and surface defects for E-type cores and toroidal cores, etc. GB/T 44069 is proposed to consist of fifteen parts.

---Part 1: General Specifications. The purpose is to establish general principles for the dimensional description and surface defect constraints of ferrite cores.

---Part 2: Pot Cores for Communication, Power Supply, and Filtering. The aim is to establish the dimensional and surface defect tolerances for pot cores.

limit.

---Part 3: Ferrite Semi-Canister Cores for Inductive Proximity Switches. The purpose is to determine the dimensions and surface defects of the semi-canister cores.

Permissible limits.

---Part 4: RM Type Cores. The purpose is to establish the dimensional and surface defect tolerance limits for RM type cores.

---Part 5: EP-type magnetic cores and accessories for inductors and transformers. The purpose is to establish the dimensions and surface finish of EP-type magnetic cores.

Defect tolerance limit.

---Part 6: ETD type magnetic cores for power supplies. The purpose is to establish the dimensional and surface defect tolerance limits for ETD type magnetic cores.

---Part 7: EER Type Cores. The purpose is to establish the dimensional and surface defect tolerance limits for EER type cores.

---Part 8: Type E Cores. The purpose is to establish the dimensional and surface defect tolerance limits for Type E cores.

---Part 9: Planar Magnetic Cores. The purpose is to establish the dimensions and permissible limits for surface defects in planar magnetic cores.

---Part 10: PM Type Cores and Accessories. The purpose is to establish the dimensional and surface defect tolerance limits for PM type cores.

---Part 11: EC type magnetic cores for power supplies. The purpose is to establish the dimensional and surface defect tolerance limits for EC type magnetic cores.

---Part 12: Toroidal Cores. The purpose is to establish the dimensions and surface defect tolerance limits for toroidal cores.

---Part 13: PQ Type Cores. The purpose is to establish the dimensional and surface defect tolerance limits for PQ type cores.

---Part 15: U-shaped magnetic cores. The purpose is to establish the dimensional and surface defect tolerance limits for U-shaped magnetic cores.

After years of development and improvement, RM type magnetic cores have optimized structure and size, making them the preferred components for electronic transformers, inductors, and other electronic devices.

However, the wide variety of core sizes makes manufacturing management and design optimization difficult, and surface defects such as cracks, chipping, and porosity can occur during production.

Traps can affect the final electromagnetic properties of magnetic cores, thus impacting the final performance of magnetic devices. This document primarily specifies the dimensions of RM type magnetic cores.

The limits of permissible surface defects help companies in this field refine technical specifications, improve product quality, standardize production and trading practices, and promote enterprise development.

The healthy development of the industry and even the entire sector.

Limits of Ferrite Core Size and Surface Defects Part 6: ETD type magnetic core for power supply

1 Scope

This document specifies the key dimensions related to the mechanical interchangeability of preferred series ETD type magnetic cores made of ferrite, as well as the dimensions related to the magnetic core.

The basic dimensions of the coil bobbin used and the effective parameter values for calculating this type of magnetic core are given, along with the surface defect tolerance of the ETD type magnetic core.

The guide to the limit.

This document is generally used as a sub-guideline in negotiations between core