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

GB/T 44069.4-2024

**Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 4: RM-cores
(English Translation)**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 4 of GB/T 44069 "Guidelines for Dimensions and Surface Defect Limits of Ferrite Cores". GB/T 44069 has been the following parts were published.

--- Part 4: RM type core.

This document replaces GB/T 9634.2-2002 "Guidelines for surface defect limits of ferrite cores Part 2: RM cores" and Compared with GB/T 9634.2-2002, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Changed the scope of the document (see Chapter 1, Chapter 1 of GB/T 9634.2-2002);

---Added important dimensions related to mechanical interchangeability for the preferred series RM cores and low-profile RM cores made of ferrite dimensions, and the coil bobbin lead pin locations relative to the core bottom contour on a 2.54 mm PCB grid.

(See Chapter 4);

--- Added the installation of RM type core (see Chapter 5);

--- Added defect limits for crystal spots and pores (see 6.6, 6.8).

This document is equivalent to IEC 63093-4:2019 "Guidelines for dimensional and surface defect limits of ferrite cores Part 4: RM type core".

The following minimal editorial changes were made to this document.

--- Added introductory words for the items (see 6.3.3, 6.6, 6.8);

---Change a column item with only one item to a segment (see 6.7);

--- IEC 63093-2 replaces the obsolete IEC 61317-2 (see A.3).

Introduction

Due to the manufacturing method and the physical characteristics of the product, ferrite cores will have a certain degree of physical defects, such as falling pieces, irregular edges, Cracks, flash and sticking. The tolerance of these surface defects depends mainly on the defect type, location and size and the structure of the core.

GB/T 44069 "Guidelines for the Limits of Ferrite Core Sizes and Surface Defects" mainly specifies the core series (such as RM cores, pot cores, E GB/T 44069 is intended to consist of fifteen parts.

--- Part 1: General specifications. The purpose is to establish general principles for the

dimensional description and surface defect limitation of ferrite cores.

--- Part 2: Pot cores for communications, power supplies and filters. The purpose is to establish the dimensions and surface defect tolerances of pot cores.

limit.

--- Part 3: Ferrite half-pot cores for inductive proximity switches. The purpose is to establish the dimensions and surface defects of half-pot cores.

Allowable limit.

--- Part 4: RM type core. The purpose is to establish the size and surface defect tolerance limits of RM type core.

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

The permissible limit.

--- Part 6: ETD type cores for power supplies. The purpose is to establish the dimensions and surface defect tolerances of ETD type cores.

--- Part 7: EER type core. The purpose is to establish the size and surface defect tolerance limits of EER type core.

--- Part 8: E-type core. The purpose is to establish the size and surface defect tolerance limits of E-type cores.

--- Part 9: Planar magnetic cores. The purpose is to establish the dimensions and surface defect tolerances of planar magnetic cores.

--- Part 10: PM cores and their accessories. The purpose is to establish the size and surface defect tolerance limits of PM cores.

--- Part 11: EC cores for power supplies. The purpose is to establish the permissible limits for dimensions and surface defects of EC cores.

--- Part 12: Toroidal cores. The purpose is to establish the dimensions and surface defect tolerances of toroidal cores.

--- Part 13: PQ type core. The purpose is to establish the size and surface defect tolerance limits of PQ type core.

--- Part 14: EFD core. The purpose is to establish the size and surface defect tolerance limits of EFD core.

--- Part 15: U-shaped core. The purpose is to establish the size and surface defect tolerance limits of U-shaped core.

After years of development and improvement, the RM core has an optimized structure and