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Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 5: EP-cores and associated parts for use in inductors and transformers

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CONTENTS

FOREWORD 2
1 Scope 4
2 Normative references 4
3 Terms and definitions 4
4 Primary dimensions 4
4.1 General 4
4.2 Dimensions of EP-cores 5
4.2.1 Principal dimensions 5
4.2.2 Effective parameter and A_{min} values 5
4.3 Dimensional limits for coil formers 6
4.4 Pin locations and base outlines 7
5 Limits of surface irregularities 8
5.1 General 8
5.2 Examples of surface irregularities 9
5.3 Chips and ragged edges 9
5.3.1 General 9
5.3.2 Chips and ragged edges on the mating surfaces 9
5.3.3 Chips and ragged edges on the other surfaces 10
5.4 Cracks 12
5.5 Flash 12
5.6 Pull-outs 12
5.7 Crystallites 13
5.8 Pores 14
Annex A (informative) EP-core design 15
A.1 General 15
A.2 Pin location and base outlines 15

Figure 1 – Principal dimensions of EP-cores 5
Figure 2 – Main dimensions of coil formers for EP-cores 6
Figure 3 – Pin locations (SMD type) viewed from the upper side of the board 7
Figure 4 – Pin locations (PTH type) viewed from the underside of the board 8
Figure 5 – Examples of surface irregularities 9
Figure 6 – Chip and ragged edge location for EP-cores 10
Figure 7 – Crack flash and pull-out locations for EP-cores 12
Figure 8 – Crystallite location for EP-cores 13
Figure 9 – Pore location for EP-cores 14

Table 1 – Principal dimensions of EP-cores 5
Table 2 – Effective parameter and A_{min} values 6
Table 3 – Dimensional limits for coil formers for EP-cores 6
Table 4 – Area and length reference for visual inspection 11
Table 5 – Limits for cracks 13

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IEC 63093-5 has been prepared by IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials. It is an International Standard.

This second edition cancels and replaces the first edition published in 2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) revision of Table 2 according to IEC 60205:2016.

The text of this International Standard is based on the following documents:

Draft	Report on voting
51/1580/FDIS	51/1589/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63093 series, published under the general title *Ferrite cores - Guidelines on dimensions and the limits of surface irregularities*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,

– withdrawn, or

– revised.

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of EP-cores made of ferrite, the essential dimensions of coil formers to be used with them and the locations of their terminal pins on a 2,50 mm printed wiring grid in relation to the base outlines of the cores and the effective parameter values to be used in calculations involving them. It also gives guidelines on allowable limits of surface irregularities applicable to EP-cores.

The specifications contained in this document are useful in negotiations between ferrite core suppliers and users about surface irregularities.

The general considerations upon which the design of this range of cores is based are as given in Annex A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60205, *Calculation of the effective parameters of magnetic piece parts*

IEC 60401-1, *Terms and nomenclature for cores made of magnetically soft ferrites - Part 1: Terms used for physical irregularities and reference of dimensions*

IEC 63093-1, *Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 1: General specification*