Ferrites and accessories

Standards and specifications

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EPCOS AG is a TDK Group Company.

Standards and specifications

1 IEC standards

PIease refer also the latest CO publications (www.iec.ch)

Standard	Title
IEC 62317-2 Ed. 1.0	Ferrite cores – Dimensions – Part 2: Pot-cores for use in telecommunications, power supply, and filter applications (replaces IEC 60133 Ed. 4.0)
IEC 60205 Ed. 3.0	Calculation of the effective parameters of magnetic piece parts
IEC 60401-1 Ed. 1.0	Terms and nomenclature for cores made of magnetically soft ferrites – Part 1: Terms used for physical irregularities
IEC 60401-2 Ed. 2.0	Terms and nomenclature for cores made of magnetically soft ferrites – Part 2: Reference of dimensions
IEC 60401-3 Ed. 2.0	Terms and nomenclature for cores made of magnetically soft ferrites – Part 3: Guidelines on the format of data appearing in manufacturers catalogues of transformer and inductor cores
IEC 60424-1 Ed. 2.0	Ferrite cores – Guidelines on the limits of surface irregularities – Part 1: General specification
IEC 60424-2 Ed. 2.0	Ferrite cores – Guidelines on the limits of surface irregularities – Part 2: RM-cores
IEC 60424-3 Ed. 2.0	Ferrite cores – Guidelines on the limits of surface irregularities – Part 3: ETD-cores, EER-cores, EC-cores and E-cores
IEC 60424-4 Ed. 2.0	Ferrite cores – Guidelines on the limits of surface irregularities – Part 4: Ring-cores
IEC 60424-5 Ed. 1.0	Ferrite cores – Guide on the limits of surface irregularities – Part 5: Planar-cores
IEC 62317-11 Ed. 1.0	Ferrite cores – Dimensions – Part 11: EC-cores for use in power supply applications (replaces IEC 60647 Ed. 1.0)
IEC 60732 Ed. 1.0	Measuring methods for cylinder cores, tube cores and screw cores of magnetic oxides
IEC 62317-6-Ed. 1.0	Ferrite cores – Dimensions – Part 6: ETD-cores for use in power supplies (replaces IEC 61185 Ed. 2.0)
IEC 62317-8 Ed. 1.0	Ferrite cores – Dimensions – Part 8: E-cores (replaces IEC 61246 Ed. 1.1)
IEC 61247 Ed. 1.0	PM-cores made of magnetic oxides and associated parts – Dimensions
IEC 61332 Ed. 2.0	Soft ferrite material classification
IEC 61333 Ed. 1.0	Marking on U and E ferrite cores
IEC 62317-13 Ed. 2.0	Ferrite cores – Dimensions – Part 13: PQ-cores for use in power supply applications

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Standard	Title
IEC 60424-8 Ed. 1.0	Ferrite cores – Guidelines on the limits of surface irregularities – Part 8: PQ-cores
IEC 62317-5 Ed. 1.0	Ferrite cores – Dimensions – Part 5: EP-cores and associated parts for use in inductors and transformers (replaces IEC 61596 Ed. 1.0)
IEC 61631 Ed. 1.0	Test method for the mechanical strength of cores made of magnetic oxides
IEC 62044-1 Ed. 1.0	Cores made of soft magnetic materials – Measuring methods – Part 1: Generic specification
IEC 62044-2 Ed. 1.0	Cores made of soft magnetic materials – Measuring methods – Part 2: Magnetic properties at low excitation level
IEC 62044-3 Ed. 1.0	Cores made of soft magnetic materials – Measuring methods – Part 3: Magnetic properties at high excitation level
IEC 62317-4 Ed. 1.0	Ferrite cores – Dimensions – Part 4: RM-cores and associated parts (replaces IEC 60431 Ed. 2.0)
IEC 62317-7 Ed. 1.0	Ferrite cores – Dimensions – Part 7: EER-cores
IEC 62317-9 Ed. 1.0	Ferrite cores – Dimensions – Part 9: Planar cores
IEC 62323 Ed. 1.0	Dimensions of half pot-cores made of ferrite for inductive proximity switches
IEC 62358 Ed. 2.0	Ferrite cores – Standard inductance factor for gapped cores and its tolerance
IEC/TR 61604 Ed. 1.0	Dimensions of uncoated ring cores of magnetic oxides

1.1 Quality assessment

The IEC standards mainly specify dimensions, designations and magnetic characteristics, whereas the European system of quality assessment CECC and the harmonized DIN-CECC standards additionally define methods of measurement and quality levels.

Since 1982 the IEC has been establishing the so-called IEC Q-system, which will have worldwide applicability. German DIN IEC standards are being harmonized with this quality system.

CECC and IEC-Q standards have a similar structure: they are subdivided into generic specifications (GS), sectional specifications (SS) and blank detail specifications (BDS). The numbering system of QC is analogous to that of CECC.

The detail specifications of CECC and IEC do not fully correspond to each other.

A quality assessment system of “Capability Approval” for the production of ferrite parts is being established.

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