

High frequency inductive components — Electrical characteristics and measuring methods —

Part 1: Nanohenry range chip inductor

ICS 29.100.10

National foreword

This British Standard is the UK implementation of EN 62024-1:2008. It is identical to IEC 62024-1:2008, incorporating corrigendum July 2008. It supersedes BS EN 62024-1:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/51, Transformers, inductors, magnetic components and ferrite materials.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 August 2008

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ISBN 978 0 580 67780 9

Amendments/corrigenda issued since publication

Date	Comments
30 June 2009	Change made to formula on page 17, 5.4 measuring temperature

**High frequency inductive components -
Electrical characteristics and measuring methods -
Part 1: Nanohenry range chip inductor
(IEC 62024-1:2008)**

Composants inductifs à haute fréquence -
Caractéristiques électriques
et méthodes de mesure -
Partie 1: Inductance à puce
de l'ordre du nanohenry
(CEI 62024-1:2008)

Induktive Hochfrequenz-Bauelemente -
Elektrische Eigenschaften
und Messmethoden -
Teil 1: Chipinduktivitäten
im Nanohenry-Bereich
(IEC 62024-1:2008)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 51/908/FDIS, future edition 2 of IEC 62024-1, prepared by IEC TC 51, Magnetic components and ferrite materials, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62024-1 on 2008-03-01.

This European Standard supersedes EN 62024-1:2002.

EN 62024-1:2008 includes the following significant technical changes with respect to EN 62024-1:2002:

- size 0402 added in Table 1 and Table 2;
- contents of 4.4 reviewed for easier understanding;
- errors in 3.1.4.2 corrected.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement | (dop) | 2008-12-01 |
| – latest date by which the national standards conflicting
with the EN have to be withdrawn | (dow) | 2011-03-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62024-1:2008 was approved by CENELEC as a European Standard without any modification.

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HIGH FREQUENCY INDUCTIVE COMPONENTS – ELECTRICAL CHARACTERISTICS AND MEASURING METHODS –

Part 1: Nanohenry range chip inductor

1 Scope

This part of IEC 62024 specifies electrical characteristics and measuring methods for the nanohenry range chip inductor that is normally used in high frequency (over 100 kHz) range.

2 Normative references

The following referenced documents are indispensable for the application 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 61249-2-7, *Materials for printed boards and other interconnecting structures – Part 2-7: Reinforced base materials clad and unclad – Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test) copper-clad*

ISO 6353-3, *Reagents for chemical analysis – Part 3: Specifications – Second series*

ISO 9453, *Soft solder alloys – Chemical compositions and forms*

3 Inductance, Q-factor and impedance

3.1 Inductance

The inductance of an inductor is measured by the vector voltage/current method.