

High frequency inductive components — Electrical characteristics and measuring methods —

Part 1: Nanohenry range chip inductor

The European Standard EN 62024-1:2002 has the status of a
British Standard

ICS 29.100.10

National foreword

This British Standard is the official English language version of EN 62024-1:2002. It is identical with IEC 62024-1:2002.

The UK participation in its preparation was entrusted to Technical Committee EPL/51, Transformers, inductors, magnetic components and ferrite materials, which has the responsibility to:

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This British Standard, having been prepared under the direction of the Electrotechnical Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 1 November 2002

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 16, an inside back cover and a back cover.

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Amendments issued since publication

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EUROPEAN STANDARD

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English version

**High frequency inductive components -
Electrical characteristics and measuring methods
Part 1: Nanohenry range chip inductor
(IEC 62024-1:2002)**

Composants inductifs à haute fréquence -
Caractéristiques électriques
et méthodes de mesure
Partie 1: Inductance pastille
de l'ordre du nanohenry
(CEI 62024-1:2002)

Induktive Hochfrequenzbauelemente -
Elektrische Eigenschaften
und Messmethoden
Teil 1: Chipinduktivitäten
im Nanohenry-Bereich
(IEC 62024-1:2002)

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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 51/658/FDIS, future edition 1 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 2002-07-01.

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) 2003-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2005-07-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex A and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62024-1:2002 was approved by CENELEC as a European Standard without any modification.

HIGH FREQUENCY INDUCTIVE COMPONENTS – ELECTRICAL CHARACTERISTICS AND MEASURING METHODS –

Part 1: Nanohenry range chip inductor

1 Scope

This International Standard 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 60249-1:1982, *Base materials for printed circuits – Part 1: Test methods*

ISO 6353-3:1987, *Reagents for chemical analysis – Part 3: Specifications – Second series*

ISO 9453:1990, *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.

3.1.1 Measurement circuit

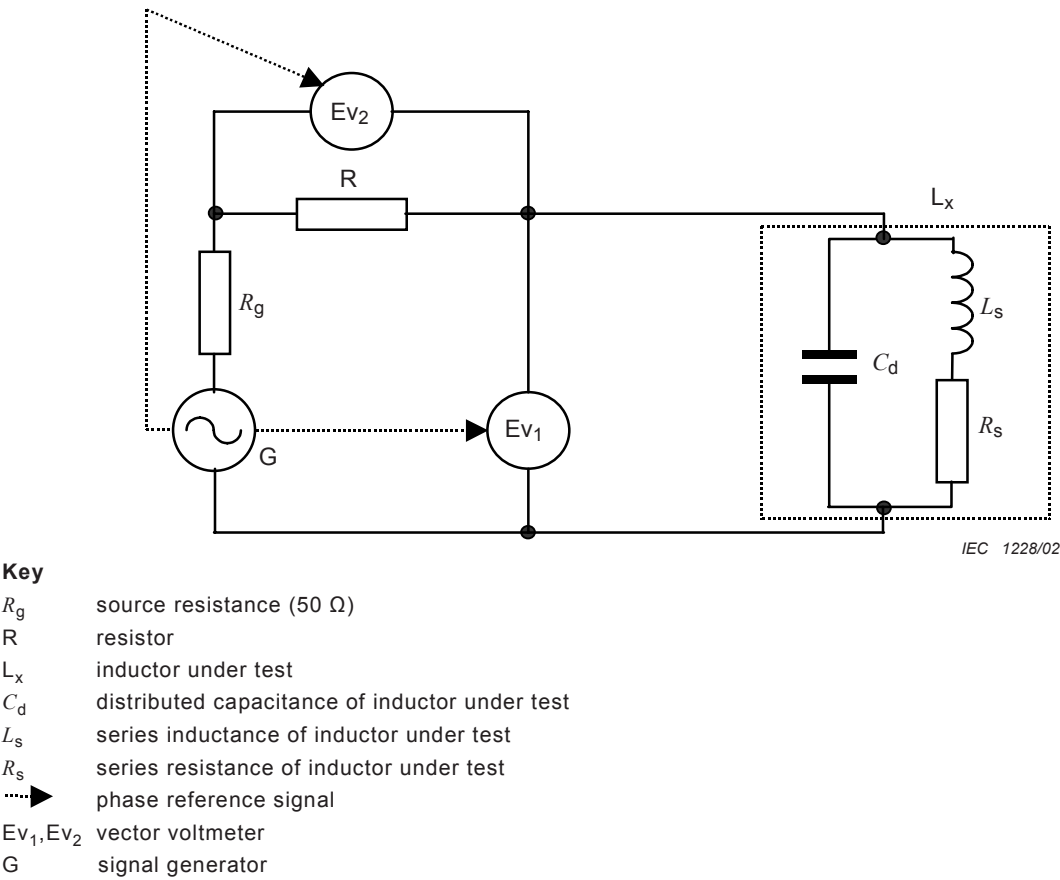


Figure 1 – Example of circuit for the vector voltage/current method

3.1.2 Mounting of the inductor to the test fixture

The inductor shall be measured in a test fixture as specified in the relevant standard. If no fixture is specified, one of the following test fixtures A or B shall be used. The fixture used shall be reported.

3.1.2.1 Fixture A

The shape and dimensions of fixture A shall be as shown in figure 2.

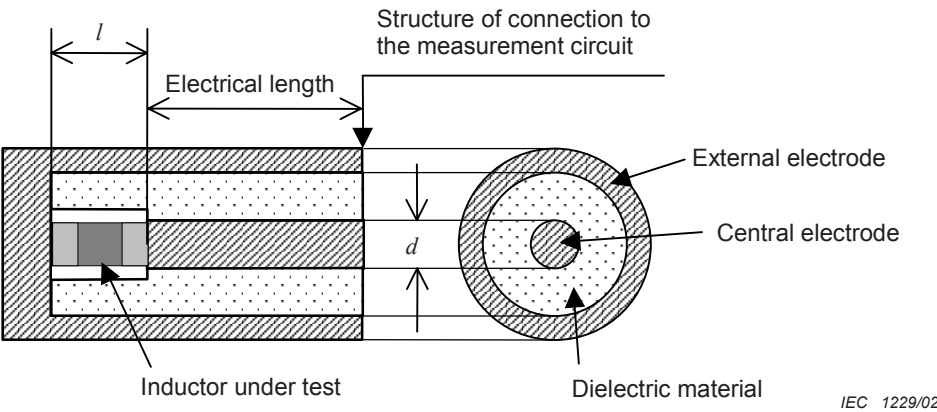


Figure 2 – Fixture A