



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

GB/T 40852.1-2021

**High frequency inductive components - Non-electrical characteristics
and measuring methods - Part 1: Fixed, surface mounted inductors for
use in electronic and telecommunication equipment**

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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 of Standardization Documents"

Drafting.

This document is the first part of GB/T 40852 "Non-electric characteristics of high-frequency inductive components and their measurement methods". GB/T 40852 has been released

The following parts.

---Part 1. Surface mount fixed inductors for electronic and communication equipment.

This document is equivalent to the adoption of IEC 62025-1.2007 "Non-electrical characteristics of high-frequency inductive components and their measurement methods-Part 1. Electronics and communication

Surface Mounted Fixed Inductors for Communication Equipment".

This document has made the following minimal editorial changes.

---Added "3 terms and definitions", Chapter 3 becomes Chapter 4, and so on.

Introduction

With the continuous development of electronics and communication technology, the application of surface-mounted fixed inductors has been very extensive. Of electronic and communication equipment

High-density installation places higher requirements on the miniaturization, electrical and mechanical properties of inductors. In order to facilitate production and trade, it is necessary to standardize the table

Terminology, standard values, dimensions, mechanical properties and electrical properties of surface-mounted fixed inductors. GB/T 40852 "High-frequency inductive components non-electrical special

Sex and its measurement method is composed of two parts.

---Part 1. Surface mount fixed inductors for electronic and communication equipment.

Established the requirements and description of surface mount fixed inductors

Terminology, recommended standard values and dimensions.

---Part 2. Measurement methods of non-electrical characteristics. Specifies the measurement method of non-electrical characteristics of surface-mounted fixed inductors.

GB/T 40852 "Non-electrical characteristics of high-frequency inductive components and their measurement methods" aims to guide high-frequency inductive component companies to organize production and

Foreign trade, improve the technical level of the inductor industry.

Non-electrical characteristics of high-frequency inductive components and their measurement methods

Part 1. For electronic and communication equipment

Surface mount fixed inductor

1 Scope

This document applies to surface mount fixed inductors and ferrite beads.

When the specifications in this document are inconsistent with the detailed product specifications, the detailed product specifications should prevail.

The purpose of this document is to establish the requirements, description terms, recommended standard values and dimensions for surface-mounted fixed inductors, which can be used as surface-mounted

Guidelines for the use of fixed inductors.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

IEC 61605.20161) Fixed inductor identification code for electronic and communication equipment (Fixed inductors for use in electronic

andtelecommunicationsequipment-Markingcodes)

3 Terms and definitions

There are no terms and definitions that need to be defined in this document.

4 Graphic symbols and naming

Surface-mounted fixed inductors are named using a combination code of 12 numbers and letters. The naming of ferrite beads should be in the detailed specification

Regulation.

a) b) c) d) e)

a) Inductor type.

Surface-mounted fixed inductors should use the three-letter code "LCL".

b) Dimensions.

The external dimensions of surface mount inductors should be represented by four numbers, each of L and W (or H) has two dimensions.

A number with a specific meaning. As shown in Figure 1, for shape D, the first two numbers indicate the long side size L, and the last two numbers indicate the short

Side size W; For shape K, the first two numbers indicate the shape size L, and the last two numbers indicate the height size H.

c) External shape.

The external shape of the surface-mounted fixed inductor is represented by the single letter code given in Figure 1.

The shape code of the inductor is classified according to its external shape.

1) IEC 61605.2005 has been replaced by IEC 61605.2016, and the content cited in this document still applies.