



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

GB/T 40675.3-2021

**Noise suppression sheet for digital devices and equipment -
Part 3: Characterization of parameters of noise suppression
sheet**

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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"

drafted:

This document is part 3 of GB/T 40675 "Noise Suppression Sheets for Digital Devices and Equipment"; GB/T 40675 has been released to

Lower part:

--- Part 1: Definitions and general properties;

--- Part 2: Measurement methods;

--- Part 3: Parameter characteristics of noise suppression sheet:

This document is identical to IEC 62333-3:2010 "Noise Suppression Sheets for Digital Devices and Equipment - Part 3: Parameters of Noise Suppression Sheets

characteristic":

The following editorial changes have been made to this document:

---In the original international standard, "Figure 2" and "Figure 3" are correspondingly changed to "Figure 1" and "Figure 2";

---Introduction words are added before the items (see 5:1:3):

Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

The noise suppression sheet has the advantages of wide application frequency range, large operating temperature range, good electromagnetic noise suppression effect, and large thermal conductivity:

It is used in mobile phones, digital cameras, digital video cameras, notebook computers, scanners, CD/VCD, PDA, car navigation systems and other fields:

It is used to reduce crosstalk between lines, reduce electromagnetic induction coupling of connected circuits, reduce radiation, attenuate the induced current on the LCD shielding layer, attenuation

Reduce the interference of internal radio frequency circuits, reduce the SAR specific radiation rate of mobile phones, etc: With the high frequency, miniaturization, integration and functionalization of electronic equipment

With the development trend, noise suppression sheets are more and more widely used in digital devices and equipment:

GB/T 40675 "Noise Suppression Sheet for Digital Devices and Equipment" consists of 3 parts:

--- Part 1: Definitions and general properties: Defines electromagnetic fields for digital devices and equipment using frequencies between 30MHz and 30GHz

Terms and Definitions of Noise Suppression Sheets, gives the effect of the use of noise suppression sheets on the signal:

--- Part 2: Measurement methods: Specifies the method for measuring the electromagnetic properties of noise suppression sheets: These measurements can

Tablet performance is effectively and reproducibly measured to ensure that manufacturers and users get the same measurement results:

--- Part 3: Parameter characteristics of noise suppression sheet: The digital devices and equipment used in the frequency range of 30MHz to 30GHz are given

Parametric characterization with electromagnetic noise suppression sheet (NSS):

The noise suppression sheet industry for devices and equipment provides performance description guidelines designed to help users understand the technical data in technical manuals, guide the use of

Users select the most suitable NSS for each application area, establishes a newly developed NSS performance measurement benchmark for manufacturers, maintains NSS and its application

Use the high reliability of products to standardize production and trading behavior in the industry and promote the healthy and orderly development of the industry:

Noise Suppression Sheets for Digital Devices and Equipment

Part 3: Parametric characteristics of noise suppression sheets

1 Scope

This document gives the parameters of electromagnetic noise suppression sheet (NSS) for digital devices and equipment with frequencies between 30MHz and 30GHz

feature: This document also provides guidelines for the description of noise suppression sheet performance in the manufacturer's technical data: NSS is the suppression at the noise source

noise, rather than absorbing it at a distance: Therefore NSS differs from RF absorbers used in free space:

The values given in this document are typical parameter (attribute) values associated with NSS: The performance values for a particular device are not easy or even impossible to predict:

Therefore, the purpose of the NSS test is to evaluate the rating against the material:

Each detailed material and NSS specification should be mutually agreed between the user and the manufacturer:

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to

this document:

GB/T 1033:1-2008 Determination of the density of non-foamed plastics - Part 1: Impregnation method, pycnometer method and titration method

(ISO 1183-1:2004, IDT)

GB/T 2421-2020 Environmental Testing Overview and Guidelines (IEC 60068-1:2013), IDT)

1) IEC 60068-1:1988 has been replaced by IEC 60068-1:2013, and the contents quoted in the text still apply:

ISO 527-1 Determination of tensile properties of plastics - Part 1: General properties-Part 1:Generalprinciples)

Note: GB/T 1040:1-2018 Determination of Tensile Properties of Plastics Part 1: General (ISO 527-1:2012, IDT)

ISO 3611 Product Geometric Specification (GPS) Design and metrological characteristics

of micrometers for external measurement of dimensional measuring equipment [Geometrical product specifications (GPS)-Dimensional measuring equipment: Micrometers for external measurements-Design and metrological characteristics]

measurements-Design and metrological characteristics]

ISO 22007-1 Determination of thermal conductivity and thermal diffusivity of plastics - Part 1: General

thermal conductivity and thermal diffusivity-Part 1: General principles)

ISO 22007-2 Determination of thermal conductivity and thermal diffusivity of plastics - Part 2: Transient planar heat source (hot plate) method

[Plastics-Determination of thermal conductivity and thermal diffusivity-Part 2: Transient plane heat source (Hot Disc) method]

ISO 22007-3 Determination of thermal conductivity and thermal diffusivity of plastics - Part 3: Method of temperature wave analysis (Plastics-Deter-

mination of thermal conductivity and thermal diffusivity-Part 3: Temperature wave analysis method)

ISO 22007-4 Determination of thermal conductivity and thermal diffusivity of plastics - Part 4: Laser flash method (Plastics-Determi-

nation of thermal conductivity and thermal diffusivity-Part 4: Laser flash method)

IEC 60068-2-1 Environmental Testing Part 2-1: Test Test A: Low Temperature (Environmental testing-Part 2-1:

Tests-Test A: Cold)

Note: GB/T 2423.1-2008 Environmental Testing of Electrical and Electronic Products Part 2: Test Method Test A: Low Temperature (IEC 60068-2-1:2007, IDT)