



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

GB/T 40675.1-2021

**Noise suppression sheet for digital devices and equipment -
Part 1: Definitions and general properties**

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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 40675 "Noise Suppression Sheets for Digital Devices and Equipment". GB/T 40675 has been released

Lower part.

---Part 1. Definition and general performance;

---Part 2. Measurement methods;

---Part 3. Parameter characteristics of noise suppression film.

This document is equivalent to IEC 62333-1:2006 "Digital Devices and Equipment Noise Suppression Sheet Part 1. Definition and General Performance".

This document has made the following minimal editorial changes.

--- Adjusted the order of symbols (see 3.2).

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 beneficial for applications in mobile phones, digital cameras, digital video cameras, notebook computers, scanners, CD/VCD, PDAs, car navigation systems, etc.

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

Reduce the interference of the internal radio frequency circuit, reduce the mobile phone SAR radiant rate, etc. With the high frequency, miniaturization, integration and functionalization of electronic equipment

The development trend of noise suppression film is 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. Definition and general performance. Defines the electromagnetic field for digital devices and equipment with a frequency of 30MHz~30GHz.

The terms and definitions of the noise suppression film, and the effect of using the noise suppression film on the signal are given.

---Part 2. Measurement methods. The measurement method of the electromagnetic characteristics of the noise suppression sheet is specified. These measurement methods can suppress noise

The performance of the film is effectively and repeatedly measured to ensure that manufacturers and users can get the same measurement results.

---Part 3. Parameter characteristics of noise suppression film. Digital devices and equipment with a frequency of 30MHz~30GHz are given

Use electromagnetic noise suppression sheet (NSS) parameter characteristics.

Has a great promotion effect.

Noise suppression sheet for digital devices and equipment

Part 1. Definition and general performance

1 Scope

This document defines the terms and definitions of electromagnetic noise suppression sheets for digital devices and equipment with a frequency of 30MHz~30GHz.

The effect of using noise suppression chips on the signal is given. This document also provides a description of the performance of the noise suppression sheet in the manufacturer's technical data

Guidelines. The noise suppression sheet is different from the radio frequency absorber used in free space.

This document is limited to the establishment of terms and definitions, which constitute the reference content of Part 2 of GB/T 40675. Part 2 provides for Part 1

The measurement details of the parameters defined in the section. These two parts are closely related and should be used together.

Note. This document also specifies the impact of the use of these suppression films on the signal line.

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 60050 International Electrotechnical Vocabulary
[International Electrotechnical Vocabulary (IEV)]

IEC 62333-2 Noise suppression sheet for digital devices and equipment Part
2. Measurement method (Noise suppression sheet for
digital devices and equipment-Part 2. Measuring methods)

Note. GB/T 40675.2-2021 Noise suppression sheet for digital devices and equipment Part
2. Measurement method (IEC 62333-2.2015, IDT).

3.1 Terms and definitions

The following terms and definitions defined by IEC 60050 apply to this document.

3.1.1

Noise suppression

According to its approach, suppression can generally be divided into signal decoupling, radiation suppression and transmission power attenuation.

Note. Each of the above functions is achieved through absorption and/or shielding.

3.1.2

Noise suppression sheet noise suppression sheet; NSS

The noise-suppressing sheet is composed of magnetic materials or dielectric materials or

conductive materials with electromagnetic loss function.

3.1.3

Suppression ratio

The noise level ratio of the noise suppression film and the noise suppression film, expressed in dB, divided into the same side decoupling ratio, different side decoupling ratio, and transmission attenuation

Ratio and radiation rejection ratio.

3.1.3.1

Isolateral decoupling ratio intra-decouplingratio

Rda