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

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Replacing GB/T 22318.1-2008

**Surface acoustic wave (SAW) resonators - Part 1: Generic
specification**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is Part 1 of GB/T 22318 "Surface Acoustic Wave Resonators". GB/T 22318 has released the following parts.

---Part 1. General specifications;

---Part 2. User Guide.

This document replaces GB/T 22318.1-2008 "Surface Acoustic Wave Resonators Part 1-1.General Principles and Standard Values". and

Compared with GB/T 22318.1-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

---Added priority (see Chapter 4);

---Added quality assessment procedures (see Chapter 7);

---Added test and measurement procedures (see Chapter 8).

This document is equivalent to IEC 61019-1.2004 "Surface Acoustic Wave Resonators Part 1.General Specification".

This document reverses the order of Chapter 3 and Chapter 4 of IEC 61019-1.2004.

This document has made the following minimal editorial changes.

---3.2.10.2.1 "Maximum admittance (minimum impedance) frequency" f_s in the circle in Figure 3 is corrected to f_a .

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

Introduction

The surface acoustic wave resonator standard aims to provide general requirements, quality assessment procedures, and appearance and terminal drawings of surface acoustic wave resonators.

The sample is intended to consist of the following three parts.

Part 1.General specifications. The purpose is to specify the terms and definitions, classification and characteristics of surface acoustic wave resonators, as well as quality assessment procedures.

Part 2.User Guide. The purpose is to give the basic structure and working principle of surface acoustic wave resonators, so as to provide users with reasonable choices.

Provide guidance on selecting resonators and meeting usage requirements.

Part 3.Standard shape and terminal connections. The purpose is to give the commonly used appearance diagrams and terminal functions of surface acoustic wave resonators. definition.

surface acoustic wave resonator

Part 1.General Specifications

1 Scope

This document specifies test methods for surface acoustic wave (SAW) resonators used to assess the quality of procurement capability approval procedures or qualification approval procedures.

and versatility requirements.

2 Normative reference documents

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

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

this document.

Note. GB 3100-1993 International System of Units and its Applications (eqvISO 1000.1992)

IEC 60050-561 International Electrotechnical Vocabulary (IEV) Part 561. Piezoelectric devices for frequency control and selection

ance)

Note. GB/T 2421-2020 Environmental Testing Overview and Guidelines (IEC 60068-1.2013, IDT)

Tests-TestsA.Cold)

Note. GB/T 2423.1-2008 Environmental testing of electrical and electronic products Part 2. Test methods Test A. Low temperature (IEC 60068-2-1.2007, IDT)

Tests-TestsB.Dryheat)

Note. GB/T 2423.2-2008 Environmental testing of electrical and electronic products Part 2. Test method Test B. High temperature (IEC 60068-2-2.2007, IDT)

Note. GB/T 2423.10-2019 Environmental testing Part 2. Test method Test Fc. Vibration (sinusoidal) (IEC 60068-2-6.2007, IDT)

IEC 60068-2-7 Environmental testing Part 2. Test methods Test Ga and guidance. Steady-state acceleration (Environmentaltes-

Note. GB/T 2423.15-2008 Environmental testing of electrical and electronic products Part 2. Test methods Test Ga and guidelines. Steady state acceleration

(IEC 60068-2-7.1986, IDT)

2 Tests-TestM.Lowairpressure)

Note. GB/T 2423.21-2008 Environmental testing of electrical and electronic products Part 2. Test methods Test M. Low pressure (IEC 60068-2-13.

1983, IDT)

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