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

GB/T 43186.1-2023

**Surface acoustic wave (SAW) and bulk acoustic wave(BAW)
duplexers of assessed quality - Part 1: Generic specification**

有质量评定的声表面波（SAW）和体声波（BAW）双工器 第1部分：总规范
(English Translation)

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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 43186 "Quality-rated Surface Acoustic Wave (SAW) and Bulk Acoustic Wave (BAW) Duplexers".

GB/T 43186 has released the following parts.

---Part 1: General specifications;

---Part 2: User Guide.

This document is equivalent to IEC 62604-1:2022 "Quality-rated surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers No. 1 Part. General Specifications.

This document has made the following minimal editorial changes.

---The expressions in 3.1.2.17 and 3.1.2.18 are changed to equations.

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

GB/T 43186 "Quality-rated Surface Acoustic Wave (SAW) and Bulk Acoustic Wave (BAW) Duplexers" aims to provide surface acoustic wave (SAW) the general requirements, quality

assessment procedures, appearance and terminal drawings of bulk acoustic wave (BAW) duplexers are planned to be composed of three parts.

---Part 1: General specifications. The purpose is to specify the terms and definitions of surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers, divided into categories and characteristics, and quality assessment procedures.

---Part 2: User Guide. The purpose is to provide the basic structure and operation of surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers.

The operating principle is used to provide guidance for users to reasonably select resonators and meet their usage needs.

---Part 3: Standard shape and terminal connection. The purpose is to provide surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers Commonly used outline drawings and terminal function definitions.

Quality-rated surface acoustic waves (SAW) and Bulk Acoustic Wave (BAW) Duplexer Part 1: General Specifications

1 Scope

This document specifies test methods for surface acoustic wave and bulk acoustic wave duplexers used to assess quality in a capability approval process or a qualification approval process.

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.

GB/T 2421-2020 Environmental Testing Overview and Guidelines (IEC 60068-1:2013, IDT)
 GB/T 2423.23-2013 Environmental testing of electrical and electronic products Part 2: Test methods Test Q. Sealing (IEC 60068-2-17:1994, IDT) GB/T 27700.1-2023 Surface acoustic wave filters with quality assessment Part 1: General specifications (IEC 60862-1:2015, IDT)
 IEC 60050-561 International Electrotechnical Vocabulary (IEV) Part 561: Piezoelectric, dielectric and electrostatic for frequency control, selection and detection Tests-TestA.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-TestB.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 Basic Environmental Test Procedures Part 2-7. Test Test Ga and Guidance. Steady State Acceleration (Basicenvi-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) Part 2-13. Tests-Test M. Low air pressure) 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)