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

GB/T 12859-1991

Replacing GB/T 12859-1991

**Piezoelectric ceramic resonators -- A specification in the IEC
quality assessment System for electronic components (IECQ) --
Part 1: Generic specification -- Qualification approval
(English Translation)**

Issued on: January 1, 1970

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Issued by: Standardization Administration of China

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Foreword

GB/T 12859 "quality assessment system for electronic components of piezoelectric ceramic resonator" is divided into the following parts.

- Part 1. Generic specification --- Qualification approval;
- Part 2. Sectional specification --- Qualification approval;
- Part 2-1. Blank detail specification --- Assessment level E.

This section GB/T 12859 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 12859-1991 "electronic equipment - Generic specification for piezoelectric ceramic resonators (for certification)", and GB/T 12859-1991 compared to the main changes are as follows.

- According to the general provisions of electronic components quality certification, a comprehensive quality assessment provisions of the rules of procedure;
- Mechanical and environmental test method references corresponding national standards.

This section uses redrafted law revision using IEC 61253-1:1993 "IEC quality assessment system for electronic components of piezoelectric ceramic resonators Vibration - Part 1. Generic specification --- Qualification approval. " this part of IEC 61253-1:1993 as

compared to the presence of technical differences, these differences involve the provision has blank bits through its outer margin Opposing vertical single line (|) were marked. Appendix A gives a list of corresponding technical differences and their causes.

This section also made the following editorial changes.

--- IEC standard number is used in the current directory number, the original standard of number "1253" in accordance with IEC regulations preceded by "6";

--- With GB/T 2828.1-2003 instead of IEC 410. 1973 "counter check sampling plan and procedures", the former and the latter in use no technical difference;

--- Environmental testing with the national standard GB/T 2423 instead of the corresponding IEC 60068, they are no references in this technical part of the difference;

--- 4.11.2.1 Immersion depth. "20 0-0.5mm" to "2.0 0-0.5mm".

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the frequency control and selection by the National Focal piezoelectric Standardization Technical Committee (SAC/TC182) devices.

This section drafted by. China Electronic Components Industry Association Branch of the piezoelectric crystal, Zhejiang Jia Kang Electronics Co., Ltd.

1.1 Scope

This section GB/T 12859 requirements in terms of electronic equipment and test methods for the oscillator circuit, piezoelectric ceramic resonators.

This section gives a standard technique and quality assessment system for electronic components - Sectional specification - Qualification approval and blank detail specification for use Language, inspection procedures and test methods.

1.2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2421.1-2008 Environmental testing for electric and electronic products overview and guidance (IEC 60068-1. 1988, IDT) GB/T 2423.1-2008 Environmental testing for electric and electronic products Part 2. Test methods Test A. Cold (IEC 60068-2-1:2007, IDT) GB/T 2423.2-2008 Environmental testing for electric and electronic products Part 2. Test methods Test B. Dry heat (IEC 60068-2-2:2007, IDT) GB/T 2423.3-2006 Environmental testing for electric and electronic products Part 2. Test methods - Test Cab. Damp heat test (IEC 60068-2-78:2001, IDT) GB/T 2423.4-2008 Environmental testing for electric and electronic

products Part 2. Test methods - Test Db. Damp heat (12h 12h cycle) (IEC 60068-2-30:2005, IDT) GB/T 2423.5-1995 Environmental testing for electric and electronic products Part 2. Test methods Test Ea and guidance. Shock (idt IEC 60068-2-27. 1987) GB/T 2423.6-1995 Environmental testing for electric and electronic products Part 2. Test methods - Test Eb and guidance. Bump (idt IEC 60068-2-29. 1987) GB/T 2423.10-2008 Environmental testing for electric and electronic products Part 2. Test methods Test Fc. Vibration (sinusoidal) (IEC 60068-2-6:1995, IDT) GB/T 2423.21-2008 Environmental testing for electric and electronic products Part 2. Test methods - Test M. Low air pressure (IEC 60068-2-13. 1983, IDT) GB/T 2423.22-2002 Environmental testing for electric and electronic products Part 2. Test methods - Test N. Temperature change (IEC 60068-2-14. 1984, IDT) GB/T 2423.23-1995 Environmental testing for electric and electronic products Test Q. Sealing GB/T 2423.28-2005 Environmental testing for electric and electronic products Part 2. Test methods - Test T. Soldering (IEC 60068-2-20. 1979, IDT) GB/T 2423.60-2008 Environmental testing for electric and electronic products Part 2. Test methods - Test U. Robustness of terminations and integral security Attachments strength (IEC 60068-2-21:2006, IDT)