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

GB/T 12274.1-2012

Replacing GB/T 12274-1990

**Quartz crystal controlled oscillators of assessed quality -- Part
1: Generic specification**

有质量评定的石英晶体振荡器 第1部分：总规范
(English Translation)

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Foreword

GB/T 12274 "assessed quality quartz crystal oscillator" is divided into the following sections.

- Part 1. Generic specification;
- Part 2. Guide;
- Part 3. Sectional specification - Capability approval;
- Part 3-1. Blank detail specification - Capability approval;
- Part 4. Sectional specification - Qualification approval;
- Part 4-1. Blank detail specification - Qualification approval.

This is Part 1 GB/T 12274 in.

Rules in this section in accordance with GB/T 1.1-2009 given draft.

This Part replaces GB 12274-1990 "assessed quality quartz crystal oscillators - Part 1. Generic specification", and GB 12274-Compared to 1990, the main changes are as follows.

- Increased 34 terms and definitions;
- According to the general provisions of electronic components quality certification, a comprehensive quality assessment provisions of the rules of procedure;

--- Increased by 25 electrical properties measurements, nine mechanical and environmental test items, test methods for durability;

--- Added Appendix A, Appendix B, Appendix C and Appendix D.

This section uses redrafted law revision adopts IEC 60679-1:2007 "quartz crystal oscillators - Part 1. Generic specification." this portion of IEC 60679-1:2007 technical differences exist compared to the terms of these differences has been involved through its outer margins Vertical single-line position (l) was indicated in Appendix D gives the corresponding list of technical differences and their reasons.

This section also made the following editorial changes.

--- Normative References 3.2.39 and removed ANSIT1.105.03, ANSIT1.101, TelcordiaGR-253 and ETSIEN300462.

--- Chapter 2 raised to the "Priority" in Chapter 3.

Location --- straight lines in FIG. 2 are offset, and is corrected to the correct location.

--- 8 Videos complement the top-right jitter tolerance line $f_3 \sim f_4$ segment.

--- 5.5.22.4 "AM frequency response" is calculated on the total distortion to 5.5.22.3 "amplitude distortion" in the.

--- Metric instead of imperial Wire Gauge.

--- This section with environmental testing of national standards GB/T 2423 instead of the corresponding IEC 60068, they are unskilled in reference to this part of the Surgery difference.

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, China Electronics Standardization Institute.

1 Scope

This section GB/T 12274 provisions of the capability approval procedures or qualification approval procedures for assessing the quality of the quartz oscillator test Test methods and general requirements.

This section applies to the capability approval procedures or qualification approval procedures assessed quality quartz crystal oscillator.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article 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 and Overview Guide (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. high temperature (IEC 60068-2-2:2007, IDT) GB/T 2423.3-2006 Environmental testing for electric and electronic products Part 2. Test methods Cab. Damp heat test (IEC 60068-2-78:2001, IDT) GB/T 2423.4-2008 electric and electronic products environmental testing procedures - Part 2. Test methods - Test Db alternating hot and humid (12h 12h cycle) (IEC 60068-2-30:2005, IDT) GB/T 2423.5-1995 Environmental testing for electric and electronic products Part II. 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 II. Test methods - Test Eb and guidance. Bump (idt IEC 60068-2-29. 1987) GB/T 2423.8-1995 Environmental testing for electric and electronic products Part II. Test methods - Test Ed. Free fall (idt IEC 60068-2-32:1990) GB/T 2423.10-2008 Electrical and Electronic Products Environmental Testing Part 2. Test methods Test Fc. Vibration (sinusoidal) (IEC 60068-2-6:1995, IDT) GB/T 2423.15-2008 Electrical and Electronic Products Environmental Testing Part 2. Test methods - Test Ga and guidance. Acceleration, steady state Degree (IEC 60068-2-7. 1986, IDT) GB/T 2423.16-2008 Electrical and Electronic Products Environmental Testing Part 2. Test methods - Test J and guidance. Mould growth (IEC 60068-2-10:2005, IDT) GB/T 2423.18-2000 Electrical and Electronic Products Environmental Testing Part 2. Test methods - Test Kb. Salt mist, cyclic (chloride Sodium) (idt IEC 60068-2-52.1996) GB/T 2423.21-2008 Electrical and Electronic Products Environmental Testing Part 2. Test methods - Test M. Low air pressure (IEC 60068-2-13. 1983, IDT) GB/T 2423.22-2002 Electrical and Electronic Products Environmental Testing Part 2. Test methods - Test N. Temperature change (IEC 60068-2-14. 1984, IDT)