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

GB/T 12273.501-2012

Replacing GB/T 15020-1994

**Quartz crystal units -- A specification in the quality assessment
system for electronic components -- Part 5.1: Blank detail
specification -- Qualification approval**

石英晶体元件 电子元器件质量评定体系规范 第5.1部分：空白详细规范 鉴定批准
(English Translation)

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Foreword

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

GB/T 12273 "crystal element quality assessment system for electronic components" is divided into the following parts.

- Part 1. Generic specification;
- Part 2. Guide;
- Part 3. Standard outlines and lead end;
- Part 4. Sectional specification - Capability approval;
- Part 4.1. Blank detail specification - Capability approval;
- Part 5. Sectional specification - Qualification approval;
- Part 5.1. Blank detail specification - Qualification approval.

This section GB/T 12273 Part 5.1.

This Part replaces GB/T 15020-1994 "quartz crystal components for electronic equipment - Blank detail specification - Resistance welded quartz crystal element Member Assessment level E ", compared with the GB/T 15020-1994, in addition to editorial changes outside the main changes are as follows.

- Since this standard system increases the specification, blank detail specification corresponding reference content according to specification modification;
- Deletion of the specification should be written directly in the provision of the Content;
- Standard No. according to different part of the standard has been adjusted.

This section uses redrafted law revision adopted IEC 61178-3-1:1993 "IEC Electronic Component quality quartz crystal units - Assessment System - Part 3. Sectional specification - Qualification approval Section 1. Blank detail specification. " this part of IEC 61178-3-1:1993 compared to the adjustment in the structure due to. IEC 61178-1 is IEC

60122-1:2002 Generation for now other parts of IEC 61178 also remain in force. According to IEC 60122 it is expected structure of this part of IEC 60122 shall be Section 5.1, which numbered adjustment to be revised. This part of IEC 60122 is expected structure. Such a structure and clear direction They use, and IEC concerning frequency control and selection of components is consistent with the trend of adjustment of structure and norms.

This part made the following editorial changes.

--- Shape and dimension drawings from the perspective of the third to the first perspective;

--- Normative references in the current IEC document for the current version.

--- With GB/T 2828.1-2003 instead of IEC 410. 1973 count of the sampling plan and inspection procedures, the former with the latter, in use, no technical difference.

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

This part of the National Focal frequency control and selection 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.

Foreword

Blank detail specification Blank detail specification is a supplementary document specification, which provides a detailed specification of the format and content of the minimum requirements.

In developing detailed specifications should be GB/T 12273-1996 requirements in Chapter 2 into consideration.

For the production of small quantities of crystal element may not be employed in this specification, it recommended approval capabilities.

Detailed specification of identification for the page numbers in square brackets, should fill in the following respective items in the appropriate position.

[1] permission to publish their detailed specification of the name of national standards bodies. When applicable, a detailed specification from the agency.

[2] IEC Q number assigned by the IEC and detailed specification number.

[3] The total number specification and related specifications and their version numbers. any difference, but also together with the national mark.

[4] any further content and IEC Q number of different detailed specification of country code, date of publication, and the national system requirements and any revision number.

Identification of the quartz crystal element [5] Description quartz crystal quartz crystal element or range of elements (such as the nominal frequency, harmonic number, cut type, vibration mode).

[6] according to IEC 60122-3 content and structure of a typical modification member (if applicable) (eg resistance welding, cold welding).

For [5] and [6], detailed specifications shall be given in IEC QC001005 content and IEC QC001004 enough content to fill.

[7] of the chief interchangeability sized topographical map, it shall comply with IEC 60122-3 and its amendments member and (or) in line with the corresponding national or International standard document on the shape requirements. Moreover, this figure can also be given in the detailed specification of the appendix.

Can be obtained from the specification [1] version [2] Release date Page of Page According to GB/T 12273-1996 [3] Qualification approval assessed quality components [4] Shape and dimensions [7] (First Perspective) Unit. mm Quartz crystal element [5] Crystal box [6] Quartz crystal units Quality assessment system for electronic components Section 5.1. Blank detail specification Qualification approval

1 Ratings

Priority ratings See GB/T 12273-1996 2.3.

- Operating temperature range;
- Circuit conditions;
- The maximum excitation level;
- Excitation level measurement;
- Climate class;
- Mechanical test severities.

The detailed specification approved by a qualified components factory information can be obtained from IEC QC001005.

The property value of 2 the property values \u200b\u200bsee GB/T 12273-1996 2.2.

- Nominal frequency/range;
- Reference temperature;
- Frequency difference;
- Maximum resonance resistance.

Alternatively, you can also specify other characteristics of the following.

- The largest and capacitance;
- Dynamic parameters or frequency pulling range;
- Useless response;
- Ageing;
- Excitation level correlation.

NOTE: If necessary, the above-described characteristics may be given in tabular form.

3 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 2828.1 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch inspection sampling plan GB/T 12273-1996 crystal element quality assessment system for electronic components - Part 1. Generic specification (IEC 61178-1:1993, IDT) GB/T 16517-1996 crystal element quality assessment system for electronic components - Part 3. Sectional specification - Qualification granted