

# FINAL VERSION

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## Quartz crystal units of assessed quality – Part 1: Generic specification



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### QUARTZ CRYSTAL UNITS OF ASSESSED QUALITY –

#### Part 1: Generic specification

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**This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.**

International Standard IEC 60122-1 has been prepared by IEC technical committee 49: Piezoelectric and dielectric devices for frequency control and selection.

This third edition of IEC 60122-1 constitutes a technical revision.

International Standard IEC 60122-1 is the first part of a new edition of the IEC standard series for quartz crystal units of assessed quality.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

IEC 60122 consists of the following parts under the general title: Quartz crystal units of assessed quality:

- Part 1: Generic specification (IEC 60122-1);
- Part 2: Guide to the use of quartz crystal units for frequency control and selection (IEC 60122-2 at present);
- Part 3: Standard outlines and lead connections (IEC 60122-3);
- Part 4: Sectional specification – Capability Approval (IEC 61178-2 at present);
- Part 4-1: Blank detail specification – Capability Approval (IEC 61178-2-1 at present);
- Part 5: Sectional specification – Qualification Approval (IEC 61178-3 at present);
- Part 5-1: Blank detail specification – Qualification Approval (IEC 61178-3-1 at present).

The QC number which appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

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A bilingual version of this publication may be issued at a later date.

## QUARTZ CRYSTAL UNITS OF ASSESSED QUALITY –

### Part 1: Generic specification

## 1 General

### 1.1 Scope

This part of IEC 60122 specifies the methods of test and general requirements for quartz crystal units of assessed quality using either capability approval or qualification approval procedures.

### 1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60027(all parts), *Letter symbols to be used in electrical technology*

IEC 60050(561):1991, *International Electrotechnical Vocabulary (IEV) – Chapter 561: Piezoelectric devices for frequency control and selection*

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-1:1990, *Environmental testing – Part 2: Tests – Tests A: Cold*

IEC 60068-2-2:1974, *Environmental testing – Part 2: Tests – Tests B: Dry heat*

IEC 60068-2-3:1969, *Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state*

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-7:1983, *Environmental testing – Part 2: Tests – Test Ga: Acceleration, steady state*

IEC 60068-2-13:1983, *Environmental testing – Part 2: Tests – Test M: Low air pressure*

IEC 60068-2-14:1984, *Environmental testing – Part 2: Tests – Test N: Change of temperature*

IEC 60068-2-17:1994, *Basic environmental testing procedures – Part 2: Tests – Test Q: Sealing*

IEC 60068-2-20:1979, *Environmental testing – Part 2: Tests – Test T: Soldering*

IEC 60068-2-21:1999, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*

IEC 60068-2-27:1987, *Environmental testing – Part 2: Tests – Test Ea and guidance: Shock*

IEC 60068-2-29:1987, *Environmental testing – Part 2: Tests – Test Eb and guidance: Bump*

IEC 60068-2-30:1980, *Environmental testing – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)*

IEC 60068-2-32:1975, *Environmental testing – Part 2: Tests – Test Ed: Free fall (Procedure 1)*