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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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QUARTZ CRYSTAL UNITS OF ASSESSED QUALITY –

Part 1: Generic specification

FOREWORD

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In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted 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);
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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.

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

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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*

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

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

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

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IEC 60444-4:1988, *Measurement of quartz crystal unit parameters by zero phase technique in a π -network – Part 4: Method for the measurement of the load resonance frequency f_L , load resonance resistance R_L and the calculation of other derived values of quartz crystal units, up to 30 MHz*

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FINAL VERSION

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