

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Piezoelectric sensors –
Part 1: Generic specifications**

**Capteurs piézoélectriques –
Partie 1: Spécification générique**





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INTERNATIONAL
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CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
3.1 General.....	7
3.2 Piezoelectric sensors	8
3.3 Types of chemical sensors.....	8
3.4 Types of physical sensors.....	9
4 Symbols of sensor elements	9
4.1 General.....	9
4.2 Symbol for sensor elements of BAW resonator type	10
4.3 Symbol for sensor elements of SAW resonator type	10
4.4 Symbol for sensor elements of SAW delay-line type.....	11
4.5 Symbol for sensor elements of non-acoustic type.....	11
4.6 Symbols.....	11
5 Specifications	12
5.1 Sensor elements	12
5.1.1 General	12
5.1.2 Sensor elements of resonator and delay-line types	12
5.1.3 Sensor elements of non-acoustic type	13
5.2 Frequency ranges	13
5.3 Level of drive or input power	13
5.4 Unwanted response	13
5.5 Analysis of measurements	13
5.6 Enclosure	14
5.7 Performance confirmation	14
5.8 Long-term and short-term stabilities.....	14
6 Measurement and detection methods	14
7 Delivery conditions	14
7.1 Marking.....	14
7.2 Wrapping	14
7.3 Packaging.....	14
8 Quality and reliability	15
8.1 Focus	15
8.2 Validity of release	15
8.3 Test procedures	15
8.4 Screening requirements	15
8.5 Unchecked parameters	15
9 Test and measurement procedures.....	15
9.1 General.....	15
9.1.1 Classification of tests.....	15
9.1.2 Shipping test	15
9.1.3 Mechanical and environmental test.....	15
9.2 Test and measurement conditions.....	16
9.2.1 Standard conditions for testing	16
9.2.2 Equilibrium state.....	16

9.2.3	Power supply	16
9.2.4	Alternative test system	16
9.2.5	Visual inspection	17
9.3	Test conditions for shipment	17
9.3.1	Temperature dependence of frequency, phase, insertion loss/gain, motional resistance, and electric charge / voltage	17
9.3.2	Unwanted response	17
9.3.3	Shunt capacitance	17
9.3.4	Insulation resistance	17
Annex A (normative) Measurement methods		18
A.1	General	18
A.2	Measurement methods using reflection and transmission characteristics	18
A.3	Measurement methods using oscillation circuits	19
A.4	Measurement method of non-acoustic type sensor elements and cells	20
A.5	Other measurement methods	20
Annex B (normative) Detection methods		21
B.1	General	21
B.2	Detection methods	21
B.2.1	Frequency difference measurement	21
B.2.2	Insertion loss/gain measurement	22
B.2.3	Phase difference measurement	22
B.2.4	Other detection methods	23
Bibliography		24
Figure 1 – Conceptual diagrams for sensor elements of BAW resonator type		10
Figure 2 – Symbol for sensor elements of BAW resonator type		10
Figure 3 – Conceptual diagram of sensor elements of SAW resonator type		10
Figure 4 – Symbol for sensor elements of SAW resonator type		10
Figure 5 – Conceptual diagram for sensor elements of SAW delay-line type		11
Figure 6 – Symbol for sensor elements of SAW delay-line type		11
Figure 7 – Conceptual diagram for sensor elements of non-acoustic type		11
Figure 8 – Symbol for sensor elements of non-acoustic type		11
Figure A.1 – Measurement method using reflection characteristics of BAW resonator type sensor elements and cells		18
Figure A.2 – Measurement method using reflection characteristics of SAW resonator type sensor elements and cells		18
Figure A.3 – Measurement method using transmission characteristics of SAW delay- line type sensor elements and cells		19
Figure A.4 – Measurement method using oscillation circuit consisting of BAW resonator type sensor elements and cells		19
Figure A.5 – Measurement method using oscillation circuit consisting of SAW resonator type sensor elements and cells		19
Figure A.6 – Measurement method using oscillation circuit consisting of SAW delay- line type sensor elements and cells		20
Figure A.7 – Measurement method using amplifier consisting of non-acoustic type sensor elements and cells		20
Figure B.1 – Measurement of frequency difference using two oscillation circuits		21

Figure B.2 – Measurement of frequency difference using an oscillation circuit and frequency synthesizer	22
Figure B.3 – Measurement of insertion loss/gain difference using two oscillation circuits	22
Figure B.4 – Measurement of phase difference using signal generator and phase detector	23

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PIEZOELECTRIC SENSORS –**Part 1: Generic specifications**

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International Standard IEC 63041-1 has been prepared by IEC technical committee TC 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This bilingual version (2019-11) corresponds to the monolingual English version, published in 2017-12.

The text of this International Standard is based on the following documents:

CDV	Report on voting
49/1220/CDV	49/1249/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63041 series, published under the general title *Piezoelectric sensors*, can be found on the IEC website.

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PIEZOELECTRIC SENSORS –

Part 1: Generic specifications

1 Scope

This part of IEC 63041 applies to piezoelectric sensors of resonator, delay-line and non-acoustic types, which are used in physical and engineering sciences, chemistry and biochemistry, medical and environmental sciences, etc.

The purpose of this document is to specify the terms and definitions for the piezoelectric sensors, and to make sure from a technological perspective that users understand the state-of-art piezoelectric sensors and how to use them correctly.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-561:2014, *International Electrotechnical Vocabulary – Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection*

IEC 60122-2-1, *Quartz crystal units for frequency control and selection – Part 2: Guide to the use of quartz crystal units for frequency control and selection – Section One: Quartz crystal units for microprocessor clock supply*

IEC 60444-9, *Measurement of quartz crystal unit parameters – Part 9: Measurement of spurious resonances of piezoelectric crystal units*

IEC 60617, *Graphics symbols for diagrams*, available at <http://std.iec.ch/iec60617>

ISO 2859-1:1999, *Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 80000-1:2009, *Quantities and units – Part 1: General*

3 Terms and definitions

3.1 General

For the purpose of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses;

- IEC Electropedia: available at <http://www.electropedia.org/>
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