



# INTERNATIONAL STANDARD

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## Piezoelectric sensors – Part 1: Generic specifications

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

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

9.2.3	Power supply .....	15
9.2.4	Alternative test system .....	15
9.2.5	Visual inspection .....	16
9.3	Test conditions for shipment .....	16
9.3.1	Temperature dependence of frequency, phase, insertion loss/gain, motional resistance, and electric charge / voltage .....	16
9.3.2	Unwanted response .....	16
9.3.3	Shunt capacitance .....	16
9.3.4	Insulation resistance .....	16
Annex A (normative) Measurement methods .....		17
A.1	General .....	17
A.2	Measurement methods using reflection and transmission characteristics .....	17
A.3	Measurement methods using oscillation circuits .....	18
A.4	Measurement method of non-acoustic type sensor elements and cells .....	19
A.5	Other measurement methods .....	19
Annex B (normative) Detection methods .....		20
B.1	General .....	20
B.2	Detection methods .....	20
B.2.1	Frequency difference measurement .....	20
B.2.2	Insertion loss/gain measurement .....	21
B.2.3	Phase difference measurement .....	21
B.2.4	Other detection methods .....	22
Bibliography .....		23
Figure 1 – Conceptual diagrams for sensor elements of BAW resonator type .....		9
Figure 2 – Symbol for sensor elements of BAW resonator type .....		9
Figure 3 – Conceptual diagram of sensor elements of SAW resonator type .....		9
Figure 4 – Symbol for sensor elements of SAW resonator type .....		9
Figure 5 – Conceptual diagram for sensor elements of SAW delay-line type .....		10
Figure 6 – Symbol for sensor elements of SAW delay-line type .....		10
Figure 7 – Conceptual diagrams for sensor elements of non-acoustic type .....		10
Figure 8 – Symbol for sensor elements of non-acoustic type .....		10
Figure A.1 – Measurement method using reflection characteristics of BAW resonator type sensor elements and cells .....		17
Figure A.2 – Measurement method using reflection characteristics of SAW resonator type sensor elements and cells .....		17
Figure A.3 – Measurement method using transmission characteristics of SAW delay- line type sensor elements and cells .....		18
Figure A.4 – Measurement method using oscillation circuit consisting of BAW resonator type sensor elements and cells .....		18
Figure A.5 – Measurement method using oscillation circuit consisting of SAW resonator type sensor elements and cells .....		18
Figure A.6 – Measurement method using oscillation circuit consisting of SAW delay- line type sensor elements and cells .....		19
Figure A.7 – Measurement method using amplifier consisting of non-acoustic type sensor elements and cells .....		19
Figure B.1 – Measurement of frequency difference using two oscillation circuits .....		20

Figure B.2 – Measurement of frequency difference using an oscillation circuit and frequency synthesizer .....	21
Figure B.3 – Measurement of insertion loss/gain difference using two oscillation circuits .....	21
Figure B.4 – Measurement of phase difference using signal generator and phase detector .....	22

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### PIEZOELECTRIC SENSORS –

#### Part 1: Generic specifications

#### FOREWORD

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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.

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.

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.

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

## 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, *Graphical 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*