

ICS 31.030

CCS L90



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

GB/T 15750-2008

Replacing GB/T 15750-1995

**Test methods for the properties of piezoelectric ceramics - Test
for the ageing properties**

压电陶瓷材料性能测试方法 老化性能的测试

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Foreword

This standard replaces GB/T 15750-1995 "of piezoelectric ceramics aging testing procedures." This standard compared with GB/T 15750-1995, there are the following changes.

--- Modify the test conditions;

--- Increasing the aging time performance of tests;

--- Aging tests to determine the temperature of the treatment temperature. The standard proposed by China State Shipbuilding Corporation. This standard by the National Standardization Technical Committee Marine boat marine materials application technology at the Technical Committee. This standard was drafted. the state-owned China Shipbuilding Industry Corporation seventh twenty-one plant. The main drafters of this standard. Zhu Bin, Zhang Hui, Zhang Liying. This standard replaces the standards previously issued as follows:

--- GB/T 15750-1995. Properties of piezoelectric ceramics test methods Aging test

1 Scope

GB/T 15750-2008 is the Chinese national standard on test methods for the properties of piezoelectric ceramics - test for the ageing properties, in the field of electronics. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 20 October 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2009. Classification: ICS 31.030, CCS L90. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the piezoelectric ceramic material aging time and temperature

aging test conditions, test methods and test procedures and calculation method. This standard applies to the piezoelectric ceramic material aging time and temperature aging test.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2414.1 Test methods for properties of piezoelectric ceramics discs radially stretching vibration mode

GB/T 2414.2 Test methods for properties of piezoelectric ceramics Transverse length extension vibration mode

GB/T 3389.1 ferroelectric ceramics vocabulary Test

GB/T 3389 properties of piezoelectric ceramics test method performance parameters

GB/T 6427 piezoelectric ceramic oscillator frequency temperature stability test methods

GB/T 11310 properties of piezoelectric ceramics test methods relative permittivity of free test temperature characteristics

3 Terms, definitions and symbols GB/T terms, definitions and symbols established in 3389.1 The following terms apply to this standard.

3.1 A polarized piezoelectric ceramic material performance parameters with time varying properties.

3.2 To improve the properties of piezoelectric ceramics processing temperature stability, low temperature performance parameters with aging, aging duration (or cycle How many times) and changes in the characteristics.

4 Test Conditions

4.1 Test atmospheric conditions Test atmospheric conditions are as follows:

- a) Temperature. 15 °C ~ 35 °C, during the test temperature should be controlled within ± 2 °C;
- b) Relative humidity. 25% to 75%;
- c) Atmospheric pressure. 86kPa ~ 106kPa.

4.2 Arbitration test atmospheric conditions Arbitration test atmospheric conditions are as

follows:

- a) temperature. $25\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$;
- b) Relative humidity. 45% to 55%;

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