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

GB/T 2423.8-1995

**Environmental testing for electric and electronic products - Part
2: Test methods - Test Ed: Free fall
(English Translation)**

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Foreword

This Standard identically adopts International Electrotechnical Commission Standard IEC 68-2-32 (Edition 2 of 1975) Basic Environmental Testing Procedures Part 2.Tests - Test Ed. Free fall, Amendment 1 of 1982 and Amendment 2 of 1990.

In this way, this national Standard is the same as the international standard so as to meet the needs of international trade, technology and economic exchanges.

This Standard replaces GB 2423.8-81 "Electric and electronic products - Basic

environmental test regulations for electricians - Test Ed. The free falling method" and GB 2424.6-81 "Electric and electronic products - Basic environmental test regulations for electricians - Test Eb. The collision method". GB 2423.8-81 and GB 2424.6-81 were drafted based on IEC 68-2-32 (Edition

2 of 1975) Basic Environmental Testing Procedures Part 2.Tests - Test Ed.

Free fall.

This Standard is identical to IEC 68-2-32 (Edition 2 of 1975), Amendment 1 of

1982 and Amendment 2 of 1990 in technical content, formatting and rules. The

main changes in this Standard and the previous edition are as follows.

- combined GB 2423.8 and GB 2424.6 into one standard GB/T 2423.8;
- according to the two revisions to IEC 68-2-32 in 1982 and 1990, modified Annex A and Method Two, supplemented Annex B.

The following four standards and this Standard are the scope of the impact test.

The relevant specifications shall be based on the use of the product and the specific circumstances of the transport to select the appropriate test method (see Annex B).

- GB/T 2423.5-1995 Environmental testing for electric and electronic products Part 2.Test methods Test Ea and guidance. Shock
 - GB/T 2423.6-1995 Environmental testing for electric and electronic products - Part 2.Test methods - Test Eb and guidance. Bump
 - GB/T 2423.7-1995 Environmental testing for electric and electronic products - Part 2.Test methods Test Ec and guidance. Drop and topple
- Primarily for equipment-type specimens
- GB 2423.39-90 Basic environmental testing procedures for electric and electronic products - Test Ee. Bounce

Annex A, Annex B of this Standard are standard annexes.

This Standard was proposed by People's Republic of China Ministry of Electronics Industry.

This Standard shall be under the jurisdiction of National Electrotechnical Products Environmental Conditions and Environmental Testing Standardization Technical Committee.

The drafting organizations of this Standard. First Institute of Posts and Telecommunications, Fifth Institute of Electronics Industry.

Main drafters of this Standard. Wang Yuchun, Wei Bei, He Jinkang, Yu Zhanquan, Wang Shurong.

IEC Foreword

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) These resolutions or agreements are used internationally in the form of recommendation and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This publication has been prepared by Sub-Committee 50A, Shock and Vibration Tests, of IEC Technical Committee No. 50, Environmental Testing.

A first draft was discussed at the meeting held in Stockholm in 1972. As a result of this meeting, a draft, document 50A (Central Office)138, was submitted to the National Committees for approval under the Six Months' Rule in March 1973.

The following countries voted explicitly in favor of publication.

Australia, Belgium, Brazil, Czechoslovakia, Denmark, Egypt, Finland, Germany, France, Israel, Japan, Netherlands, Norway, Poland, Portugal, South Africa (Republican), Romania, Spain, Sweden, Switzerland, Turkey, Soviet Union, United Kingdom, United States of America.

The first revision was made in 1982, adding Annex B guidelines.

A second revision was made in 1990, based on the following documents.

File No.

modified Six Months' Rule Vote report February program Vote report

2 50A(CO)181 50A(CO)185 50A(CO)186 50A(CO)187

1 50A(CO)152 50A(CO)157

More detailed information can be found in the vote report listed in the above table.

The second revision updates the contents of the two annexes.

Environmental testing for electric and electronic
products - Part 2. Test methods - Test Ed. Free fall

1 Purpose

To determine the adaptability of the product intended to fall due to rough loading-unloading during handling or to determine the minimum level of security required for safety.

2 Test conditions

It refers to the height between the test surface and the sample location closest to it when the test sample is suspended before falling.

The method of releasing the test sample shall allow the test sample to fall freely from the suspended position. When releasing, minimize interference.