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GB/T 2423.32-2008 / IEC 60068-2-54:2006

Replacing GB/T 2423.32-1985, GB/T 2424.21-1985

**Environmental Testing for Electric and Electronic
Products - Part 2: Test Methods - Test Ta: Solderability
Test by the Wetting Balance Method**

电工电子产品环境试验 第2部分：试验方法

试验 Ta：润湿称量法可焊性

(IEC 60068-2-54:2006, IDT)

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**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;**

**Standardization Administration of the People's Republic of
China.**

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Foreword

GB/T 2423 *Environmental Testing for Electric and Electronic Products - Part 2: Test Methods* is divided into several parts in accordance with the test methods.

This is Part 32 of GB/T 2423. This Part equivalently adopts international standard IEC 60068-2-54:2006. In comparison with the international standard, this Part mainly makes the following editorial modifications:

- a) The Foreword and Introduction of the international standard are deleted;
- b) The Foreword of the national standard is added;
- c) The national standards that adopt international standards are quoted;
- d) The tabs A.1 ~ A.11 in Appendix A are deleted, and the contents are directly converted into paragraphs.

In comparison with the previous version, the main differences are as follows:

- a) This Part combines GB/T 2423.32-1985 and GB/T 2424.21-1985;
- b) Lead-free solder is added;
- c) Different test temperatures are set in accordance with the solder composition;
- d) The polarity of force of the force-time curve;
- e) Representative points and parameters on the force-time curve;
- f) GB/T 2424.21-1985 is modified into Appendix B;
- g) Bibliography is added.

Appendix A of this Part is normative; Appendix B is informative.

This Part was proposed by and shall be under the jurisdiction of National Technical Committee 8 on Environmental Conditions of Electric and Electronic Products and Environmental Test of Standardization Administration of China (SAC/TC 8).

The drafting organization of this Part: Guangzhou National Electric Apparatus Research Institute.

The main drafter of this Part: Yan Jinglian.

The issuing of the previous versions:

---GB/T 2423.32-1985;

Environmental Testing for Electric and Electronic Products - Part 2: Test Methods - Test Ta: Solderability

Test by the Wetting Balance Method

1 Scope

This Part of GB/T 2423 outlines Test Ta, solder bath wetting balance method applicable for any shape of component terminations to determine the solderability. It is especially suitable for reference testing and for components that cannot be quantitatively tested by other methods. For surface mounting devices (SMD), IEC 60068-2-69 should be applied if it is suitable.

2 Normative References

The clauses of the following documents become clauses of this Part through the reference in GB/T 2423. In terms of references with a specified date, all subsequent amendments (excluding corrected content) or revisions are not applicable to this Standard. However, all parties that reach an agreement in accordance with this Standard are encouraged to explore the possibility of adopting the latest editions of these documents. In terms of references without a specified date, the latest edition is applicable to this Standard.

GB/T 2421-1999 Environmental Testing for Electric and Electronic Products - Part 1: General and Guidance (idt IEC 60068-1:1988)

GB/T 2423.28-2005 Basic Environmental Testing Procedures for Electric and Electronic Products - Part 2: Test Methods - Test T: Soldering (IEC 60068-2-20:1979, IDT)

IEC 61190-1-3:2002 Attachment Materials for Electronic Assembly - Part 1-3: Requirements for Electronic Grade Solder Alloys and Fluxed and Non-fluxed Solid Solders for Electronic Soldering Applications

3 Terms and Definitions

For the purposes of this document, the terms and definitions, as defined in GB/T 2421-1999 and GB/T 2423.28-2005, apply.

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