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NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 4937.7-2026

Semiconductor devices-Mechanical and climatic test methods-Part 7: Internal moisture content measurement and the analysis of other residual gases

半导体器件 机械和气候试验方法 第7部分：内部水汽测量和其它残余气体分析

(English Translation)

Issued on: October 30, 2026 **Implemented on: February 1, 2027**

Issued by: State Administration for Market Regulation;
Standardization Administration of China

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1 Foreword

GB/T 4937.7-2026 was issued by State Administration for Market Regulation; Standardization Administration of China on 30 October 2026 and takes effect on 1 February 2027.

It is one of 44 parts of the GB/T 4937 series.

The GB/T prefix marks a recommended standard. It is not law in itself: it becomes binding when a contract names it, when a regulation or a mandatory standard refers to it, or when a producer declares conformity with it.

2 Scope Preview

GB/T 4937.7-2026 carries no ICS number and no Chinese Standard Classification code.

This catalogue holds 76,457 other GB/T standards.

Of the 47,415 GB/T standards that do carry an ICS number, 3,437 (7%) fall under ICS 77, in the field of metallurgy.

3 About this standard

Issued by: State Administration for Market Regulation; Standardization Administration of China

4 Related standards

Other parts of this standard:

GB/T 4937-1995 - Mechanical and climatic test methods for semiconductor devices

GB/T 4937.1-2006 - Semiconductor devices -- Mechanical and climatic test methods -- Part

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1: General

GB/T 4937.2-2006 - Semiconductor devices -- Mechanical and climatic test methods -- Part 2: Low air pressure

GB/T 4937.3-2012 - Semiconductor devices -- Mechanical and climatic tests methods -- Part 3: External visual examination

GB/T 4937.4-2012 - Semiconductor devices -- Mechanical and climatic test methods -- Part 4: Damp heat, steady state, highly accelerated stress test (HAST)

GB/T 4937.8-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 8: Sealing

GB/T 4937.9-2026 - Semiconductor devices - Mechanical and climatic test methods - Part 9: Permanence of marking

GB/T 4937.10-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 10: Mechanical shock - Device and subassembly

GB/T 4937.11-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 11: Rapid change of temperature -- Two-fluid-bath method

GB/T 4937.12-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 12: Vibration, variable frequency

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GB/T 4937.14-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 14: Robustness of terminations (lead integrity)

GB/T 4937.15-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 15: Resistance to soldering temperature for through-hole mounted devices

GB/T 4937.16-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 16: Particle impact noise detection(PIND)

GB/T 4937.17-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 17: Neutron irradiation

GB/T 4937.18-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 18: Ionizing radiation (total dose)

GB/T 4937.19-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 19: Die shear strength

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GB/T 4937.21-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 21: Solderability

GB/T 4937.22-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 22: Bond strength

GB/T 4937.23-2023 - Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life

GB/T 4937.24-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 24: Accelerated moisture resistance - Unbiased HAST

GB/T 4937.25-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 25: Temperature cycling

GB/T 4937.26-2023 - Semiconductor devices - Mechanical and climate test methods - Part 26: Electrostatic discharge(ESD)sensitivity testing - Human body model(HBM)

GB/T 4937.27-2023 - Semiconductor devices - Mechanical and climatic test methods - Part 27: Electrostatic discharge(ESD) sensitivity testing - Machine model(MM)

GB/T 4937.28-2026 - Semiconductor devices - Mechanical and climate test methods - Part 28: Electrostatic discharge (ESD) sensitivity testing - Charged device model (CDM) - device level

GB/T 4937.29-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 29: Latch-up test

GB/T 4937.30-2018 - Semiconductor devices -- Mechanical and climatic test methods -- Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing

GB/T 4937.31-2023 - Semiconductor devices - Mechanical and climatic test methods - Part 31: Flammability of plastic-encapsulated devices(internally induced)

GB/T 4937.32-2023 - Semiconductor devices - Mechanical and climatic test methods - Part 32: Flammability of plastic-encapsulated devices(externally induced)

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37: Board level drop test method using an accelerometer

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GB/T 4937.40-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 40: Board level drop test method using a strain gauge

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GB/T 4937.44-2025 - Semiconductor devices - Mechanical and climatic test methods - Part 44: Neutron beam irradiated single event effect (SEE) test method for semiconductor devices

GB/T 4937.201-2018 - Semiconductor devices - Mechanical and climatic test methods - Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat

GB/T 4937.201-2026 - Semiconductor devices - Mechanical and climatic test methods - Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat

5 Classification and status

Prefix GB/T: recommended standard.

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