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

GB/T 14709-2017

Replacing GB/T 14709-1993

Adhesive coated polyimide film for flexible printed circuits

挠性印制电路用涂胶聚酰亚胺薄膜

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 14709-1993 "Coated polyimide film for flexible printed circuit", compared with GB/T 14709-1993 The main technical changes are as follows:

- Added chapter 3 terms and definitions;
- Chapter 4 adds product categories, identification examples, and the preparation of structural content;
- Added thickness and tolerance requirements in 6.2.3;
- Modify the volatile content performance requirements in 6.3 to optional technical requirements;
- 6.3 performance requirements, after the use of the post-float and temperature cycle peel strength (optional) instead of thermal shock and dry heat treatment after the peel Strength requirements, increased chemical resistance, thermal stress (float), water absorption, volume resistivity, and electrical strength requirements;
- Removed the bending fatigue test method, modified the test method of volatile matter content and fluidity to Appendix A, Appendix B, in size Increased the dimensional stability of the release layer in the stability test method;
- In 7.2, the grouping of the original test items was adjusted. The group A and group B tests in the original standard were merged into the group A test. The test (3 months to 6 months) was divided into C group (3 months) and D group (12 months). The specific test period is shown in Table 7;
- Added requirements for connector and non-conforming section dimensions in 9.2. This standard was proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This standard is under the jurisdiction of the National Printed Circuit Standardization Technical Committee (SAC/TC47). This standard was drafted by: Huashuo Technology Co., Ltd., Michael Rotek (Changzhou) Product Service Co., Ltd., and

Jiujiang Flex. Limited company, Guangdong Shengyi Technology Co., Ltd. The main drafters of this standard. Fan Heping, Yang Hao, Gao Yanru, Zhang Panxin, Wang Huazhi, Liu Wei, Yang Yan, Yang Hong, Cao Yi. The previous versions of the standards replaced by this standard are.

--- GB/T 14709-1993. Flexible printed circuit coated polyimide film

1 Scope

GB/T 14709-2017 is the Chinese national standard on adhesive coated polyimide film for flexible printed circuits, 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 29 December 2017 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 29 December 2017. Classification: ICS 31.180, CCS L30. 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 stipulates the classification, marking, structure, and material of a coated polyimide film for flexible printed circuits (hereinafter referred to as a polyimide film). Material requirements, requirements, inspection methods, inspection rules, signs, packaging, transportation and storage. This standard applies to single-sidedly coated polyimide films for flexible printed circuit coatings and double-sided coatings for multilayer flexible printed circuit boards. Polyimide film.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 2036 printed circuit terminology

GB/T 5230 Electrolytic Copper Foil

GB/T 13542.6 Films for electrical insulation - Part 6. Polyimide film for electrical insulation

GB/T 13555-2017 Polyimide film copper clad laminates for flexible printed circuits

GB/T 13557-2017 Test method for flexible copper-clad laminates for printed circuits

3 Terms and Definitions

The terms and definitions defined in GB/T 2036 and the following apply to this document.

3.1 Release material releasematerial A film or paper material that can be used to protect the product's surface or to support the product, which can remove and keep the surface from being damaged.

3.2 Vertical machinedirection;MD The length of the film or glue film in continuous manufacture.

3.3 Transverse transverse direction; TD The film or glue film is in the width direction perpendicular to the MD when it is manufactured continuously.

4 Product Classification, Identification and Structure

4.1 Product Classification Coated polyimide film products can be divided into five types according to the type of adhesive and the characteristics of the product. Its type and characteristics are Table 1 provides.