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

GB/T 9364.4-2016

Replacing GB 9364.4-2006

**Miniature fuses -- Part 4: Universal modular fuse-links (UMF) --
Through-hole and surface mount types
(English Translation)**

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Foreword

GB/T 9364 "Small Fuse" is divided into the following parts.

Part 1. Definition of small fuses and general requirements for small fuse - links;

- Part 2. Tubular fuse links;

- Part 3. Subminiature fuse links;

- Part 4. Universal module fuse - links (UMF) perforated and surface mount type;

- Part 5. Guidelines for the quality assessment of small fuse - links;

- Part 6. Fuse support for small tubular fuse links;

- Part 7. Miniature fuse links for special applications;

- Part 10. User Guide;

Part 11. fuse for LED lights.

This part is part 4 of GB/T 9364.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB 9364.4-2006 "Miniature Fuse Part 4. Universal Module Fuse".

This part of the main technical changes compared with GB 9364.4-2006 as follows.

--- According to IEC 60127-4.:2012 standard name changes, the standard name from the "small fuse part 4. universal module fuse "Small fuses" - Part 4. Universal module fuse - links (UMF) perforated and surface mount ";

- In accordance with the current revision of the standard system, the deletion of the range "for the fuse block in the fuse, is being considered";

--- according to the reference situation, adjusted the second chapter normative reference documents;

--- 7.3.1 modified to rated current greater than 5A, the nominal thickness of copper cladding should be 0.070mm;

--- 7.3.3 modified the surface mount fuse-type electrical test when the fuse part of the installation method;

--- adjust the order of Table 1 and Table 2;

- 8.6.1 and 8.6.2 modified the impregnation conditions of the solderability test of the terminals and increased the bath temperature requirements;

--- 8.7.1 and 8.7.2 modified the test program for welding heat resistance test;

--- 9.7 modified the durability test of the fuse after the temperature requirements;

--- 9.8 modified the oscilloscope can record the over-voltage duration requirements;

- Table 1 adds two rated currents and the corresponding maximum voltage drop and maximum continuous power;

--- modify the picture description of Figure 2, Figure 3, and modify Figure 5;

The minimum terminal spacing corresponding to the "250 (low breaking capacity)" column in the table is modified.

--- modified the optional requirements and soldering requirements for solder in Appendix A.

This part uses the re-drafting method to modify IEC 60127-4.:2012 "Miniature Fuses Part 4. Universal Module Fuse (UMF) perforated and surface mount ".

The technical differences between this part and IEC 60127-4.:2012 and the reasons are as follows.

--- on the normative reference documents, this part has made a technical differences in the adjustment to meet China's technical conditions, adjust the situation the situation is reflected in Chapter 2, "Normative references", as follows.

Replace GB 3. 1973 with GB/T 321 equivalent to international standards;

- Replace IEC 60068-2-20.:2008 with GB/T 2423.28-2005 with equivalent international standards;

Replace IEC 60068-2-21.:1999 with GB/T 2423.60 equivalent to the international standard;

Replacement of IEC 60127-1. 1988 and its 1999 revision with GB/T 9364.1-2015 with international standards Annex 1 and 2002 Revision 2;

- Replacement of IEC 60664-1.:1992 and its 2000 Revision 1 and GB/T 16935.1 with equivalent international standards

2002 Revision 2.

This section makes the following editorial changes.

--- In accordance with the relevant provisions of GB/T 1.1, in Chapter 1 "scope" added "GB/T 9364 of this part of the provisions of the common module melting Body terminology and definitions, general requirements, standard ratings, marking, testing, size and structure, electrical performance and other technical requirements Quasi-specification sheet ";

- the penultimate paragraph of the scope of Chapter 1 of Chapter 1 of IEC 60127-4.:2012 is deleted in accordance with the relevant provisions of GB/T 1.1;

- IEC 60194.:1999 cited in 3.3 Note 2, adjusted from the normative reference document to the reference.

This part is made by China Electrical Equipment Industry Association.

This part is headed by the National Standardization Technical Committee for Fuses (SAC/TC340).

This part of the drafting unit. China Electrical Appliances Research Institute Co., Ltd., Nanjing Sutter Technology Development Co., Ltd., Dongguan Huade Electric Co., Ltd.

Company, Wei Kai Detection Technology Co., Ltd., Shanghai Songshan Electronics Co., Ltd., Hailei (China) Electronic Technology Co., Ltd., AEM Division (Suzhou) Co., Ltd., force of the Fuse Co., Ltd., Dongguan City Bette Electronic Technology Co., Ltd., Shenzhen City, good-electronic Limited company, Shenzhen Del Electronics Co., Ltd., 100 rich Electronics Co., Ltd.

Introduction

Miniaturization of electronic equipment, and the possibility of using automated operations for printed circuit boards or other substrate system applications the trend is that the user needs a small size fuse. These fuse links should be designed to have some degree of non-detachability.

The rated voltages of 12.5V, 25V, 32V, 50V, 63V, 125V and 250V are used with the following features. Very fast action (FF), fast action (F), delay (T) and long delay (TT).

Due to the requirement in the new technology to limit the transient overvoltage, and the importance of this demand is increasing, it is recommended that the specified test conditions, As well as the associated typical circuit arrangement, through these fuse-links to limit the over-voltage.

The breaking capacity requirement can be selected in AC or DC. If the fuse meets the DC requirements, it can also be considered in line with the exchange Requirements, but need to be verified by experiment. The fuse can be marked with two ratings, and if this is the case, the manufacturer's instructions Pointed out.

Small fuses

Part 4. Universal Module Fuse (UMF) Perforated and surface mount

1 Scope and purpose

This part of GB/T 9364 specifies the terms and definitions of common module fuse links, general requirements, standard ratings, marking, testing, Inch and structure, electrical performance and other technical requirements and standard specifications.

This part applies to the protection of electrical equipment, electronic equipment and parts thereof which are normally used indoors and connected to printed circuit boards or their He is a universal module fuse assembly (UMF) for his substrate system.

This part does not apply to fuses of appliances used under special conditions (eg corrosion or explosive atmospheres).

Normally, this fuse can only be installed or replaced by a suitable tool by a suitable professional.

The purpose of this section is to specify that, in addition to the requirements of GB/T 9364.1-2015, the level of non-interchangeability requirements should be emphasized.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the