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

GB/T 16515-2023

Replacing GB/T 16515-1996

**Potentiometers for use in electronic equipment - Part 5:
Sectional specification - Single-turn rotary low-power wire
wound and non-wire wound potentiometers**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is Part 5 of "Potentiometers for Electronic Equipment". "Potentiometers for Electronic Equipment" has published the following parts.

---Part 1. General specifications (GB/T 15298-1994);

---Part 2. Sub-specification. Screw drive and rotating preset potentiometer (GB/T 15299-1994);

---Part 2. Blank Detailed specification. Screw drive and rotating preset potentiometer evaluation level E (GB/T 15300-1994);

---Part 3. Sub-specification. Rotary precision potentiometer (GB/T 15880-1995);

---Part 3. Blank Detailed specification. Rotary precision potentiometer evaluation level E (GB/T 15881-1995);

---Part 4. Sub-Specification. Single-turn rotary power potentiometer (GB/T 17025-1997);

---Part 4. Blank Detailed specification. Single-turn rotary power potentiometer evaluation level E (GB/T 17026-1997);

---Part 4. Blank Detailed specification. Single-turn rotary power potentiometer evaluation level F (GB/T 17027-1997);

---Part 5. Blank Detailed specification. Single-turn rotary low-power potentiometer evaluation level E (GB/T 17028-1997);

---Part 5. Blank Detailed specification. Single-turn rotary low-power potentiometer evaluation level F (GB/T 17029-1997);

---Part 6.Specification for surface-mounted preset potentiometers (GB/T 40562-2021);

---Part 6-1.Blank detailed specification for surface-mounted preset potentiometer evaluation level EZ (GB/T 40562.1-2023).

This document replaces GB/T 16515-1996 "Potentiometers for electronic equipment - Part 5.Specification for single-turn rotary low-power wirewound

and Non-wirewound potentiometers", compared with GB/T 16515-1996, in addition to structural adjustments and editorial changes, the main technical content changes are as follows.

---Deleted the requirements for crash test (see 2.3.3, Table 4 of the.1996 edition);

---Changed the resistance temperature characteristic values in Table 1 (see Table 1, Table 1A and Table 1B of the.1996 version);

---Changed the derating curve in Figure 3 (see Figure 3, Figure 2 of the.1996 version);

---Changed the resistor limit voltage priority value (see 5.2.5, 2.2.4 of the.1996 edition);

--- Added provisions for assessment level EZ (see Table 7 and Table 8);

---Deleted the assessment levels D, E, F and G (see Table 5A and Table 5B of the.1996 version).

This document is equivalent to IEC 60393-5:2015 "Potentiometers for electronic equipment - Part 5.Specification for single-turn low-power wirewound

and non-wirewound potentiometers".

A "Terms and Definitions" chapter has been added to this document.

This document has made the following minimal editorial changes.

---Added footnote f in Table 7 and footnote c in Table 8.

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

This document is under the jurisdiction of the National Technical Committee on Standardization of Resistor-Capacitor Components for Electronic Equipment (SAC/TC165).

Introduction

Single-turn low-power wirewound and non-wirewound potentiometers are the most widely produced types in the field of potentiometers. With the development of the potentiometer manufacturing industry

With continuous development, the performance indicators of such potentiometers are constantly improving. This type of potentiometer has many varieties and specifications,

large production volume, and involves many manufacturers.

To improve the quality of this type of potentiometers and standardize their production, this document needs to be revised.

"Potentiometers for Electronic Equipment" is divided into general specifications, sub-specifications and blank detailed specifications. It is planned to consist of the following 13 parts.

---Part 1.General specifications. The purpose is to establish the terminology, quality assessment procedures, test methods and measurement procedures of potentiometers.

---Part 2.Sub-Specification. Screw Drive and Rotary Preset Potentiometer. The purpose is to establish the advantages of screw drive and rotary preset potentiometer.

value, characteristics and general performance requirements, and select applicable quality assessment procedures, tests and measurement methods from the general specification.

---Part 2.Blank Detailed Specification. Screw drive and rotary preset potentiometer evaluation level E. The purpose is to establish the level of assessment

Format, layout and minimum content requirements for detailed specifications for E screw drives and rotary preset potentiometers.

---Part 3.Sub-specification. Rotary precision potentiometer. The purpose is to establish the priority value, characteristics and one of the rotary precision potentiometers.

General performance requirements, and select applicable quality assessment procedures, tests and measurement methods from the general specification.

---Part 3.Blank Detailed Specification. Rotary precision potentiometer evaluation level E. The purpose is to establish the rotation of the evaluation level E

The format, layout and minimum content requirements of the detailed specification for precision potentiometers.

---Part 4.Sub-Specification. Single-turn rotary power potentiometer. The purpose is to establish the priority value,

characteristics and general performance requirements, and select applicable quality assessment procedures, tests and measurement methods from the general specification.

---Part 4.Blank Detailed Specification. Single-turn rotary power potentiometer evaluation level E. The purpose is to establish the assessment level as E

Requirements for the format, layout and minimum content of the detailed specification for single-turn rotary power potentiometers.

---Part 4.Blank Detailed Specification. Single-turn rotary power potentiometer evaluation level F. The purpose is to establish an assessment level of F

The format, arrangement and minimum content requirements of the detailed specification for rotary precision potentiometers.

---Part 5.Specifications for single-turn low-power wirewound and non-wirewound potentiometers. The aim is to establish a single rotation low power line

Priority values, characteristics and general performance requirements for wound and non-wirewound potentiometers, and select applicable quality assessment procedures from the general specifications.

Test and measurement methods.

---Part 5.Blank Detailed Specification. Single-turn rotary low-power potentiometer evaluation level E. The purpose is to establish the assessment level as

The format, arrangement and minimum content requirements of the detailed specification for single-turn rotary low-power potentiometers of E.

---Part 5.Blank Detailed Specification. Single-turn rotary low-power potentiometer evaluation level F. The purpose is to establish the assessment level as

Detailed specification format, arrangement and minimum content requirements for single-turn rotary low-power potentiometers of F.

---Part 6.Specifications for surface-mounted preset potentiometers. The purpose is to establish the priority value and characteristics of surface-mounted preset potentiometers.

and general performance requirements, and select applicable quality assessment procedures, tests and measurement methods from the general specification.

---Part 6-1.Blank Detailed Specification. Surface Mount Preset Potentiometer Evaluation Level EZ. The purpose is to establish the assessment level as

EZ's detailed specification format, layout and minimum content requirements for surface mount preset potentiometers.

This document is a sub-standard and a supplement to the general specification. This document is in IEC 60393-1.2008 "Potentiometers for electronic equipment"

Part 1.General Specifications.

This document has been developed to provide priority factors and qualifications for the ratings of the rapidly evolving single-turn low power wirewound and non-wirewound potentiometers.

Unified requirements for test methods and so on.

Potentiometers for electronic equipment

Part 5.Sub-Specifications