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

GB/T 18802.341-2007

**Components for low-voltage surge protective devices -- Part
341: Specification for thyristor surge suppressors (TSS)**

低压电涌保护器件 第341部分：电涌抑制晶闸管（TSS）规范

(English Translation)

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Foreword

"Low-voltage surge protective devices (SPD)" series of standards is expected structure and names are as follows.

--- Low-voltage distribution systems with a surge protector (SPD) - Part 1. Performance

requirements and test methods (GB 18802.1.2002 /IEC 61643-1:1998);

--- Low-voltage distribution systems with a surge protector (SPD) - Part 12. Guidelines for selection and use;

--- Low-voltage surge protective devices - Part 21. telecommunications and signaling networks using low-voltage surge protection device (SPD) performance requirements and test methods Method (GB/T 18802.21.2004/IEC 61643-21:2000);

--- Low voltage surge protector Part 22. telecommunications and signaling networks choose to use low-voltage surge protection device (SPD) and practical guidance;

--- Voltage surge protective devices - Part 311. Gas Discharge Tubes (GDT) specification;

--- Voltage surge protective devices - Part 321. avalanche breakdown diode (ABD) specification;

--- Voltage surge protective devices - Part 331. varistor (MOV) specification;

--- Voltage surge protective devices - Part 341. thyristor surge suppression (TSS) specification.

This section thyristor surge suppression (TSS) specification, identical with IEC 61643-341:2001 "low-voltage surge protective devices Surge Inhibition thyristor (TSS) Specification "(in English). On the technical content of IEC standards equivalent to the above, the preparation of the rules in line with GB/T 1.1 in Claim.

This part made the following editorial changes.

a) with a decimal point ' . 'Instead of a comma as the decimal point,' ';

b) Remove the preface to international standards.

Appendix A of this section is normative appendix, Appendix B is an informative annex.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee arrester (SAC/TC81) centralized.

This section is drafted. Ceramic Institute, Xi'an, Xi'an Power Electronics Research Institute.

1 Scope

This section applies to clamp and protective way to limit the over-voltage and surge current shunt designed thyristor surge suppression (TSS), Surge protection device is particularly suitable for telecommunications networks.

This section contains the contents.

--- Terminology, definitions and letter symbols;

- Basic functions, shape and structural components;
- Working conditions and failure modes;
- Rating model validation and measurement properties.

2 Normative references

The following documents contain provisions which, through reference in this part of the provisions of this section. For dated references, all subsequent Amendments (not including errata content) or revisions do not apply to this section, however, encourage the parties to reach an agreement is part of the present study Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 4023-1997 Discrete semiconductor devices and integrated circuits - Part 2. Rectifier diodes (eqv IEC 60747-2. 1983) GB/T 4798.9 application of electric and electronic products environmental conditions inside the product microclimate (GB/T 4798.9-1997, idt IEC 60721-3-9:1993) GB/T 14733.3 telecommunications terminology reliability, maintainability and quality of service (GB/T 14733.3-1993, eqv IEC 60050.

1990)

GB/T 15291-1994 semiconductor devices Part 6. Thyristors (eqv IEC 60747-6. 1983)

NOTE: TSS with GB/T 15921-1994 thyristor described performance and applications are essentially different. These differences need to modify some of the features described and the introduction of some new terminology. These changes and additions are given in Chapter 3.

GB/T 16896.1-1997 high voltage shock test with a digital recorder first part. the digital recorder requirements (eqv IEC 61083-1:1991) GB/T 17573-1998 Semiconductor devices - Discrete devices and integrated circuits - Part 1. General (idt IEC 60747-1. 1983) GB/T 17626.5-1999 Electromagnetic compatibility - Testing and measurement techniques - Surge (impact) immunity test (idt IEC 61000-4-5.

1995)

IEC 60050 (702) Telecommunication term oscillations, signals and related devices IEC 60099-4 MOA without gaps IEC 60721-3-3 Classification of environmental conditions - Part 3 environmental parameters and their severities group classification and grading Section 3. Electric Workers electronics applications environmental conditions using a fixed workplace climate protection IEC 60749:1996 Semiconductor devices - Mechanical and climatic test methods ITU-TK. 20.1996 telecommunications switching equipment over-voltage and over-current resistance ITU-TK. 21.1996 Client of over-voltage and over-current resistance ITU-TK. 28.1993 Protection of telecommunication equipment semiconductor arrester assembly characteristics

3 Terms, symbols and definitions

The following terms, text, symbols and definitions apply to this section.

GB/T 18802.341-2007/IEC 61643-341:2001