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

GB/T 9043-2008

Replacing GB/T 9043-1999

**technical requirements of gas discharge tubes for the
over-voltage protection of telecommunications installations**

通信设备过电压保护用气体放电管通用技术条件

(English Translation)

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Foreword

This standard and the International Telecommunication Union ITU-TK. Recommendation 12 "telecommunication device protection with gas discharge characteristics" (2006) a Consistency is not equivalent and according to the development of communication technology, improve production technology and the actual needs of the discharge tube, and a certain amount of supplementary and improve so that the standard scientific, better operability and practicality.

This standard replaces GB/T 9043-1999 "communication device over-voltage protection General technical requirements of gas discharge tubes." this standard and GB/T 9043-1999 main technical differences are as follows.

--- The gas discharge tube of nominal DC breakdown voltage division finer categories (see Table 1).

--- Increase the breakdown voltage of the low-impact category breakdown voltage of the gas discharge tube (see Table 2).

--- Modify the breakdown voltage of the conformity assessment method (see Table 3).

--- Increased life test test levels, and increases the test categories (see Table 4).

--- Clear capacitive test test voltage (see 6.5).

--- Increasing the discharge power voltage range and resistance to flow test recommended program (see Appendix B).

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

The standard proposed by the People's Republic of China Ministry of Information Industry.

The standard by the China Communications Standards Association.

The standard by the China Telecommunications Corporation (Guangzhou Research Institute), an electronic EPCOS (Xiaogan) Co., Ltd., the Ministry of Information Industry and Telecommunications Research Institute Drafted.

1 Scope

This standard specifies the two-pole and three-pole gas discharge tube (hereinafter referred to as discharge) concerning the definition, classification and nomenclature, the requirements on radiation the basic requirements for substances, testing methods, environmental testing, inspection rules, marking, packaging, storage and transportation.

This standard applies to communication devices over-voltage protection with two-pole and three-pole gas discharge tubes.

This standard does not involve the discharge tube design, structure, geometry, installation, transmission quality and protection.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2423.1 Environmental testing for electric and electronic products Part 2. Test methods Test A. Cold (GB/T 2423.1-2001, idt IEC 60068-2-1:1990) GB/T 2423.2 Environmental testing for electric and electronic products Part 2. Test methods Test B. Dry heat (GB/T 2423.2-2001, idt IEC 60068-2-2. 1974) GB/T 2423.4 Environmental testing for electric and electronic products Test Db. Damp heat test, cyclic (GB/T 2423.4-1993, eqv IEC 60068-2-30. 1980) GB/T 2423.6 Environmental testing for electric and electronic products Part 2. Test methods - Test Eb and guidance. Bump (GB/T 2423.6-1995, idt IEC 60068-2-29. 1987) GB/T 2423.10 Environmental testing for electric and electronic products Part 2. Test methods - Test Fc and guidance. Vibration (sinusoidal) (GB/T 2423.10-1995, idt IEC 60068-2-6. 1982) GB/T 2423.23 Environmental testing for electric and electronic products Test Q. Sealing G`B/T 2423.28 Environmental testing for electric and electronic products Part 2. Test methods - Test T. Soldering GB/T 2423.29 electric and electronic

products environmental testing procedures Test U. Robustness of terminations and integral mounting devices (GB/T 2423.29-1999, idt IEC 60068-2-21:1992) GB/T 2828.1 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch inspection sampling plan (GB/T 2828.1-2003, ISO 2859-1:1999, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

GDT

Sealed by a gas discharge medium (not in the air at atmospheric pressure) of one or more component discharge gap device.

For hazard protective equipment and (or) personal against high voltage.

Discharge electrical breakdown discharge gap, also known as "fire" or "fire."