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

GB/T 12078-2012

Replacing GB 12078-1989

General specification for X-ray tubes

X 射线管总规范

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This specification is drafted in accordance with the rules given in GB/T 1.1-2009. This specification replaces GB/T 12078-1989 "X-ray tube general specification". The main changes in this specification compared with GB/T 12078-1989 are as follows: - the use of GB/T 10149 "medical X-ray equipment terminology and symbols" and GB/T 4597 "tube vocabulary" in the relevant terms;

--- photoelectric performance indicators to increase the leakage current, remove the X-ray tube anode current stability, gate control X-ray tube filament gate Pressure - a test method that specifies the durability of work;

--- reference GB/T 2828.1-2003 instead of the original count check sampling program. This specification is proposed by the Ministry of Industry and Information Technology of the People's Republic of China. The specification by the National Electrical Vacuum Device Standardization Technical Committee (SAC/TC167) centralized. The drafting unit. Hangzhou Wandong Electronics Co., Ltd. The main drafters of this specification. Hu Haihong, Tian Feng, Fu Yongmin, Yu Xiaomei, Hu Youcheng. This specification is replaced by previous versions of the standard release.

--- GB/T 12078-1989. General specification for X - ray tubes

1 Scope

GB/T 12078-2012 is the Chinese national standard on general specification for x-ray tubes, 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 5 November 2012 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 15 February 2013. Classification: ICS 31.100, CCS L39. 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 specification specifies X-ray tube terminology, definitions, symbols, requirements, test methods, quality assessment procedures, logos, certificates, product descriptions Books and packaging, transportation and storage. This specification applies to all types of X-ray tubes.

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 latest edition (including all modifications) applies to this document.

GB/T 191 packaging and storage icon

GB/T 2423.1-2001 Environmental testing for electric and electronic products - Part 2. Test methods - Test A. Low temperature

GB/T 2423.2-2001 Environmental testing for electric and electronic products - Part 2. Test methods - Test B. High temperature

GB/T 2423.3-2006 Environmental testing for electric and electronic products - Part 2. Test methods - Test Cab. constant damp heat test

GB/T 2423.5-1995 Environmental testing for electric and electronic products - Part 2. Test methods - Test Ea and guidance. Impact

GB/T 2423.10-2008 Environmental testing for electric and electronic products - Part 2. Test methods - Test Fc. Vibration (sinusoidal)

GB/T 2423.16-1999 Environmental testing for electric and electronic products - Part 2. Test methods - Test J and Guideline.

GB/T 2423.17-2008 Environmental testing for electric and electronic products - Part 2. Test methods Test Ka. Salt mist

GB/T 2423.21-1991 Basic environmental testing procedures for electric and electronic products - Test M. Low pressure test method

GB/T 2423.22-2002 Environmental testing for electric and electronic products - Part 2. Test methods - Test N. Temperature change

GB/T 2828.1-2003 Sampling inspection procedures - Part 1. Batch inspection samples retrieved by AQ plan

GB/T 2987 tube parameters symbols

GB/T 4597 tube vocabulary

3 Terms and definitions

GB/T 2987, GB/T 4597 and GB/T 10149 and the following terms and definitions apply to this document.

3.1 Filament of the filament The relationship between filament current and filament voltage of X - ray tube.

3.2 X-ray tube current cut-off gate voltage X-ray tube current cut-off grid voltage
Gate-controlled X-ray tube at the nominal X-ray tube voltage, resulting in X-ray tube current cut off the gate voltage.