

A THESAURUS OF TERMINOLOGY FOR  
COMPONENTS AND DEVICES FOR  
INSTRUMENTATION AND ELECTRONIC EQUIPMENT

# 仪器仪表电子元器件 术语大全

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编辑委员会 编

中国标准出版社

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## 内 容 提 要

《仪器仪表电子元器件术语大全》集国内外最新仪器仪表电子元器件术语标准之大成，较系统地编辑了光学元件、发光器、显示器件、机械元件、弹性元件、流体控制元件、电磁元件、电真空器件、半导体分立器件、集成电路、传感器与敏感元件、阻容元件、印制电路板、机电元件、仪表电池、微处理器与微计算机等十六个门类的元器件术语及定义，共6000余条，约120万字。书末还附录世界各国国家标准代号、各国际组织及发达国家专业化组织代号、我国法定计量单位、国际单位制(SI)文字符号以及中文、英文索引等，以供查阅。

本书内容丰富，实用性强，是我国第一部元器件门类齐全的大型术语工具书。可供从事仪器仪表及电子专业的科研、生产、教学及管理人员参考，更是情报翻译及标准化工作者必备工具书。

## ABSTRACT

This book includes the terms and their definitions of 16 sort components and devices for instruments and electronic equipments. They are: Optical components, Lasers, Display devices, Mechanical components, Elastic components, Fluid control components, Electromagnetic components, Electronic vacuum devices, Discrete semiconductor devices, Integrated circuits, Transducers/sensors and sensing elements, Capacitance-resistance elements, Printed circuit boards, Electromechanical components, Instrument batteries, Microprocessors, and Microcomputers. Appendices are also given at the end of this book.

This is a serviceable reference book for those engaged in scientific research, education, production, management, technical translation and standardization on instrumentation and electronic equipment.

术语是实现科学  
技术现代化的重  
要内容

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## 序

作为一个科技工作者，我很高兴地看到这部《仪器仪表电子元器件术语大全》的正式出版。

术语是对各种专业中的某些事物，用简洁的字集来表示其含义的表征形式。名词术语的统一，是现代科学技术活动中，使有共同语言，必然要采取的科学实践。没有统一的术语，将会导致在学术上及各种活动中、认识和理解上的混乱。这势必影响有效地开展国内和国际间科技的传播与交流、生产和贸易的各项活动。因此，术语的重要性是不言而喻的。

国际标准化组织和世界各国都设有专门的术语委员会，我国也成立了全国自然科学名词审定委员会。

近年来，我国的术语工作者，在有关部门及学术团体的推动下，进行了卓有成效的辑录、编订工作。不少术语标准、词典相继出版，这对某些专业术语的统一，正起着积极作用。

但是应该看到，目前在我国科技交流和出版物中，对于术语的使用比较混乱，一意多名、同名异义、名实不符、各自为义等现象时有发生；有不少学科，名词统一的工作尚未进行。这一现状与“现代化”建设的需要是不相适应的。中国标准出版社出版的这部《仪器仪表电子元器件术语大全》，为统一仪器仪表及电子技术领域中的元器件术语，提供了一本很好的参考书。值得欢迎。

仪器仪表电子元器件是一个涉及面广、而又蓬勃发展的技术领域。对如此名目繁多、不断出新的仪器仪表电子元器件

件术语进行系统地分类、命名和定义的研究，十分必要，但却往往无暇顾及。“大全”编委会适应了这一需求，参考国际、国内各方面的现有术语标准，荟萃国内众多专家、学者和工程技术人员之智慧，在不到三年的时间里，编辑了十六个门类、六千余条内容丰富而实用的元器件术语，是值得称赞的。

我向参与审订、编写和出版这部“大全”的同志们表示祝贺！鉴于仪器仪表和电子技术近年来发展异常迅速，时隔不久必然又有大量新的术语出现。因此，希望这一专著，今后能修订再版，以适应时代的需要。

## PREFACE

It gives me much pleasure, as a scientific worker, to see that A Thesaurus of Terminology for components and Devices for Instrumentation and Electronic Equipment is to be published.

Terminology is to assign simple and brief wordings or phrases used by various professional fields to express meanings of certain specialised objects or events. It is therefore deemed as a scientific measure to unify such terms so as to bring people to a common understanding of the same knowledge with the view to avoid confusion and ambiguity on occasions of academic exchange as well as on production and trading affairs. No doubt the unification of technical terms is of great importance in the modernization of our country.

For this sake, the International Organization for Standardization, as well as many individual countries have set up special committees for technical terms. Our country has also established the National Approving Committee on Scientific Terms.

In recent years, under the auspices of our government and certain scientific bodies, many workers



have devoted their efforts in collecting, compiling, and discriminating appropriate terms, and consequently many dictionaries and unified terms or terms pending approval have appeared one after another. Certainly they have played an active part towards the unification of technical terms in our country.

Nonetheless, the situation is still not a happy one. Non-conformity and confusion on the adoption of technical terms occur quite often in technical exchanges and publications. For instance, different terms in expressing the same meaning, or the same term having different meanings, or terms defined according to one's own wish, etc. are still problems. For many disciplines, such sort of work is still wanting. An addition of the present work should by all means be welcome.

The components and devices for instrumentation and electronic equipment deal with a wide scope of technology and science, and they are developing very rapidly. It is therefore really necessary to regard as a research item the classification, nomination and definition of the terms concerned, especially with the adoption of new terms frequently occurring as time goes on. One cannot deny the fact that not many workers can afford to spare much time to take part in such tedious sort of work. Much tribute

ought therefore to be paid to workers who, realizing the social needs, devoted their time and efforts in producing the Thesaurus through consulting all kinds of relevant terms at home and abroad, converging the intelligence of many experts, scientists and engineers and finally editing this substantial volume which contains 16 categories and 6000 entries, these being completed all within the short period of three years.

Now I should like to praise all the members who have taken part in the task of compiling, selecting, defining, editing and publishing for this volume. Since instrument, meter and electronic technology have developed rapidly these years, I am sure there would appear many new terms before long. I hope that this special book will be revised later on from time to time to help keeping pace with new developments in this fields.

# 出版说明

## (一)

“术语是实现科学技术现代化的重要内容。”为促进科技术语的普及和统一，适应我国现代化建设和国际交往的需要，我们邀请各方面专家、学者和科技人员共同编辑了《仪器仪表电子元器件术语大全》一书。这是我国第一部内容广泛、门类齐全的仪器仪表电子元器件大型术语集。它的出版将为从事仪器仪表及电子专业的科研、生产、教学、管理人员以及情报翻译、标准化工作者提供一部实用的术语工具书。

## (二)

全书分为十六类元器件，包括光学元件、激光器、显示器件，机械元件、弹性元件、流体控制元件、电磁元件、电真空器件、传感器与敏感元(器)件、集成电路、半导体分立器件、阻容元件、印制电路板、机电元件、仪表电池、微处理器与微计算机等，共编录术语6000余条；此外，书末另附录世界各国国家标准代号、各国际组织和发达国家专业化组织代号、我国法定计量单位、国际单位制文字符号以及中、英文索引等，以供查阅。

## (三)

本书是根据最新国际标准、国外先进标准、国内现行标准以及有关辞书、手册辑录的。从实用角度出发，书中着重

选编了那些在标准中业已肯定或影响较大的、在科技交流、文献书刊中经常出现以及对统一术语颇有参考价值的术语。同时，也编录一些发展中的新词语。但涉及制造工艺、材料、环境条件和可靠性方面的术语未予编入。

#### (四)

本书的词目编排、体例说明如下：

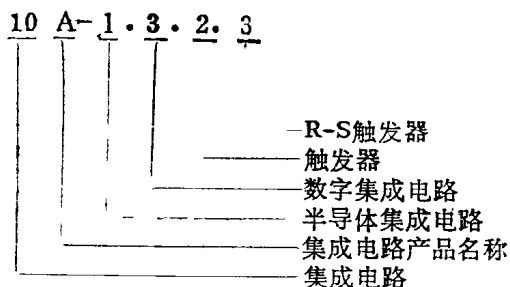
(1) 全书前面给出总目录，每篇前设分目录。

(2) 全书内容除术语的释义外，附英文对照。

(3) 每条词目由分类编号、术语、释义三部分组成。

(4) 分类编号隔以短横“-”半字线。短横左侧标示元器件的大类号，并后缀英文大写字母A、B，用以区分该类元器件的产品名称和性能参数术语；短横右侧，标示小类、主词和派生词的编号。

示例：



(5) 当同一释义有两个或两个以上术语词条时，则将它们或者并列于术语栏目内，中间隔以分号；或者置于定义栏目开头，前面冠以“又称”。

(6) 术语释义以定义为主，兼或辅以必要的说明。

### (7) 若干符号的用法

圆括号 ( ) 用于：表示括号中的字可以省略、注释内容或意义等方面的补充说明。

方括号 [ ] 用于：表明括号内的字或词可以替换或分别替换方括号前的字或词。

斜线 “/” 表示其前后字或词等同。

半字线 “-” 用于表示连字符。

(8) 在每一篇内容最后，都附有参考文献。

(9) 汉字索引按汉语拼音顺序逐字排列，英文索引按单字的字顺为序排列。

(10) 汉字索引的外文字母、阿拉伯数字及标点符号不按照汉字排列顺序，多音汉字按实际发音顺序排列。

(11) 英文索引中凡希腊文、英文缩写词开头的英文词条一律排在最前面。

### (五)

本书的编写工作，承蒙科技界各方面专家、学者的热情支持。科技界老前辈、全国自然科学名词审定委员会主任钱三强教授、中国科协副主席王大珩教授，在百忙中为本书挥笔题词、作序。在编写过程中，还得到了中国科学院学部委员王守觉教授、中国光学学会常务理事、北京工业学院光学工程系李振沂高级工程师、中国标准化综合研究所李春田所长、中国仪器仪表学会仪表元件学会副理事长、哈尔滨工业大学初允绵教授、北京航空学院吴宗岱教授、清华大学廖延彪副教授、中科院半导体所林雨研究员、天津大学叶声华教授、西安微电机研究所平友尧总工程师、南京仪表元器件研究所赵国

臣所长等专家学者的大力协助，谨在此一并致以诚挚的谢意！

另外，也向被编入本书内容的国内外作者，表示衷心感谢！

### (六)

编纂术语大全，我们还是一种尝试。鉴于水平有限，经验不足，纰漏之处在所难免，恳切希望广大读者批评指出，以便再版时修正和完善。

《仪器仪表电子元器件术语大全》

编辑委员会

一九八九年二月

## Editor's Note

(1)

To standardize terms is an important work for the realization of the four modernizations in our country. For the realization of standardization of technical terms and to meet the needs of the modernization of our construction and of the communication with other countries, we have invited experts, scientists and engineers of all fields of our country to compile A Thesaurus of Terminology for Components and Devices for Instrumentation and Electronic Equipment. This is the first thesaurus in which the classifications are complete and the contents cover a wide category of terms of elements and devices. We hope it will be a serviceable reference book for those engaged in scientific research, education, production, management, technical translation and standardization on instrumentation and electronic equipment.

(2)

The whole book consists of 16 parts. They are, Optical Components, Lasers, Display devices, Mechanical Components, Elastic Elements, Fluidic Con-

Control Components, Electromagnetic Components, Electronic Vacuum Devices, Sensing Elements and Transducers, Integrated Circuits, Semiconductor Discrete Devices, R-C Elements, Printed Circuits, Electromechanical Components, Instrument Batteries, Microprocessors and Microcomputers, including altogether over 6000 terms. For the convenience of the readers, we have also given the codes of the standards of various countries, the codes of international organizations and professional groups over the world, the legal metrological units of our country, indexed in both Chinese and English.

( 3 )

This thesaurus is compiled according to IEC standards, the standards of developed countries, available standards of our country, and relevant dictionaries and handbooks. With practical consideration, we have selected and compiled those terms that have been confirmed or have exerted much influence, those that have often appeared in scientific and technical exchanges and documents, magazines and books, and those that are of value for references in term of unification. We have also compiled some new terms. Terms relating to fabrication process, material, environment conditions and reliability,



however, are not included.

(4)

Guide to the use of the thesaurus:

1) A general table of contents is given at the beginning of the book, and separate contents are given before each part.

2) The Thesaurus is Chinese-English bilingual except for the definition of the term.

3) Each entry consists of three items: classification number, term and definition.

4) The classification number is separated by a hyphen (-). The number on the left of the hyphen denotes the main class, and English capital letters A and B following the number are used for identifying the product's name and characteristic parameter respectively, the number on the right of the hyphen denotes subclass, subject entry and derivative entry respectively.

Example:

