

ICS 31.060.30

CCS L11



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

GB/T 10185-2012

Replacing GB/T 10185-1988

**Fixed capacitors for use in electric equipment - Part 7:
Sectional specification Fixed polystyrene film dielectric metal
foil d.c. capacitors**

电子设备用固定电容器 第7部分：分规范 金属箔式聚苯乙烯膜介质直流固定电容器

Issued on: November 5, 2012

Implemented on: February 15, 2013

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions Content 4 detail specification shall give	2
4.1 General	2
4.5 Flag 3 5 mark	3
6.2 Priority Rating 4 7 quality assessment procedures	5
7.3 Certified records of released lots 5	5
8.2 Electrical Test 12	14
8.4 Resistance to soldering heat	14
8.5 weldability	15
8.6 Rapid change of temperature 15	15
8.7 Vibration	16
8.9 Shock	16
8.12 Durability	19
8.13 element solvent (when applicable)	19
11 Table 5B Assessment level	11
12 Table 6 measuring points Table insulation resistance between terminals	7
13 Test voltage	19

Foreword

"Fixed capacitors for use in electronic equipment" series of national standards divided into the following sections.

--- Part 1. Generic specification (GB/T 2693-2001, idt IEC 60384-1.1999);

--- Part 2. Sectional specification - Fixed metallized polyethylene terephthalate film dielectric dc capacitors (GB/T 7332-2011 / IEC 60384-2.2005);

--- Part 2-1. Blank detail specification - Fixed metallized polyethylene terephthalate film dielectric dc capacitors - Assessment level E and EZ (GB/T 7333-2012/IEC 60384-2-1.2005);

--- Part 3. Sectional specification for surface mounting MnO₂ solid electrolyte capacitors - (IEC 60384-3.2007);

--- Part 3-1. Blank detail specification surface mount MnO₂ solid electrolyte tantalum

capacitors - Assessment level EZ (IEC 60384-3-1.2007);

--- Part 4. Sectional specification solid and non-solid electrolyte aluminum electrolytic capacitors (GB/T 5993-2003/IEC 60384-4. 1998, No. 1 amendments.2000);

--- Part 4-1. Blank detail specification non-solid electrolyte aluminum capacitors - Assessment level EZ (GB/T 5994-2003 / IEC 60384-4-1.2000);

--- Part 4-2. Blank detail specification solid (MnO₂) electrolyte aluminum electrolytic capacitors - Assessment level EZ (IEC 60384-4-2.2007);

--- Part 6. Sectional specification - Fixed metallized polypropylene film dielectric dc capacitors (IEC 60384-6.2005);

--- Part 6-1. Blank detail specification - Fixed metallized polypropylene film dielectric dc capacitors (IEC 60384-6-1.2005);

--- Part 7-1. Blank detail specification polystyrene film dielectric metal foil dc capacitors - Assessment level E (GB/T 10186-2012);

--- Part 8. Sectional specification Fixed capacitors of ceramic dielectric, Class 1 (GB/T 5966-2011/IEC 60384-8.2005);

--- Part 8-1. Blank detail specification Fixed capacitors of ceramic dielectric, Class 1 - Assessment level EZ (GB/T 5967-2011 / IEC 60384-8-1.2005);

1 Scope

GB/T 10185-2012 is the Chinese national standard on fixed capacitors for use in electric equipment - part 7: sectional specification fixed polystyrene film dielectric metal foil d.c. capacitors, 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 31.060.30, CCS L11. 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 section specifies the priority ratings and characteristics of the metal foil polystyrene film dielectric dc capacitors, and from GB/T 2693- 2001 select the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements. Detailed specifications referenced in this section Test severities and requirements prescribed in this section shall have the same performance level or higher, it

is not allowed to reduce the level of performance. This section applies to electronic equipment used in polystyrene film as a medium and as an electrode metal foil dc capacitors. This section does not include reactive power over 200VA capacitors. This section does not include fixed electromagnetic interference suppression capacitors, which includes GB/T 14472-1998 in.

2 Normative references

The following documents for the application of this section is essential. For dated references, only the edition date of this Part apply to Minute. For undated references, the latest edition (including any amendments) apply to this section.

GB/T 321-2005 priority number and priority number system (ISO 3. 1973, IDT)

GB/T 2421.1-2008 Environmental testing for electric and electronic products overview and guidance (IEC 60068-1. 1988, IDT)

GB/T 2471-1995 resistors and capacitors priority number system (idt IEC 60063. 1963)

GB/T 2693-2001 Fixed capacitors for use in electronic equipment - Part 1. Generic specification (idt IEC 60384-1.1999)

GB/T 14472-1998 Fixed capacitors for use in electronic equipment - Part 14. Sectional specification curb the power of electromagnetic interference with a fixed electrode Container (idt

IEC 60384-14.1993, No. 1 amendments.1995)

IEC 60062.2004 resistors and capacitors sign the code

IEC 60410. 1973 count inspection sampling plans and procedures
(SamplingplansandproceduresforInspectionbyAt- tribute) IEC Q01.2008 IEC Quality Assessment System for Electronic Components Basic Rules (BasicRulesoftheIEC QualityAssess- mentSystemforElectronicComponents (IEC QSystem)) IEC QC001002-3. Rules of Procedure 1998 IEC IEC Quality Assessment System for Electronic Components (IEC Q) - Part 3. Approval Program (IEC QualityAssessmentSystemforElectronicComponents (IEC QSystem) RulesofProce- dure-Part 3. Approvalprocedures)

3 Terms and Definitions

GB/T 2693 defined by the following terms and definitions apply to this document. For ease of use, repeat the following list GB/T in 2693 of certain terms and definitions.

3.1 Stability Level stabilitylevel Ratings are based on stability after the test prescribed bias and allow the capacitance changes its temperature coefficient determined. Detailed specification