

ICS 31.060.30
CCS L 11



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

GB/T 10190-2012

Replacing GB/T 10190-1988

**Fixed capacitors for use in electronic equipment -- Part 16:
Sectional specification -- Fixed metallized polypropylene film
dielectric d.c. capacitors**

电子设备用固定电容器 第16部分: 分规范 金属化聚丙烯膜介质直流固定电容器
(English Translation)

Issued on: November 5, 2012

Implemented on: February 15, 2013

Issued by: Standardization Administration of China

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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. Sectional specification metal foil polystyrene film dielectric dc capacitors (GB/T 10185-2012);

--- 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);

--- Part 9. Sectional specification Fixed capacitors of ceramic dielectric, Class 2 (GB/T 5968-2011/IEC 60384-9:2005);

--- Part 9-1. Blank detail specification Fixed capacitors of ceramic dielectric, Class 2 - Assessment level EZ (GB/T 5969-2012 /IEC 60384-9-1:2005);

--- Part 11. Sectional specification metal foil polyethylene terephthalate film dielectric dc capacitors (IEC 60384-11:2008);

--- Part 11-1. Blank detail specification metal foil polyethylene terephthalate film dielectric dc capacitors (IEC 60384-11-1:2008);

--- Part 12. Sectional specification metal foil polycarbonate film dielectric dc capacitors (GB/T 10679-1995 /IEC 60384-12. 1988);

--- Part 12-1. Blank detail specification polycarbonate film dielectric metal foil dc capacitors - Assessment level E (GB/T 10680-1995/IEC 60384-12-1. 1988);

--- Part 13. Sectional specification polypropylene film dielectric metal foil dc capacitors (IEC 60384-13:2006);

--- Part 13-1. Blank detail specification polypropylene film dielectric metal foil dc capacitors - Assessment level E (IEC 60384-13-1:2006);

--- Part 14. Sectional specification curb the power of electromagnetic interference with a fixed capacitor (GB/T 14472-1998, idt IEC 60384-14.

1993, No. 1 amendments 1995);

--- Part 14-1. Blank detail specification curb the power of electromagnetic interference capacitors - Assessment level D (GB/T 14473-1998, idt IEC 60384-14-1:1993);

--- Part 15. Sectional specification non-solid or solid electrolyte capacitors - (GB/T

7213-2003, idt IEC 60384-15. 1982, No. 1 amendments. 1987, No. 2 amendments 1992);

--- Part 15. Blank detail specification non - solid electrolyte and foil electrode tantalum capacitors Assessment level E (GB/T 12794-1991, idt IEC 60384-15-1. 1984);

--- Part 15. Blank detail specification non-solid electrolyte and porous anode tantalum capacitors Assessment level E (GB/T 12795-1991, idt IEC 60384-15-2. 1984);

--- 15-3. Blank detail specification solid electrolyte and porous anode tantalum capacitors Assessment level E (GB/T 7214-2003/IEC 60384-15-3:1992);

16.2005);

--- Part 16-1. Blank detail specification metallized polypropylene film dielectric dc capacitors - Assessment levels E and EZ (GB/T 10191-2011/IEC 60384-16-1:2005);

--- Part 17. Sectional specification - Fixed metallized polypropylene film dielectric ac and pulse capacitors (IEC 60384-17:2005);

--- Part 17-1. Blank detail specification metallized polypropylene film dielectric ac and pulse capacitors - Assessment level EZ (IEC 60384-17-1:2005);

--- Part 18. Sectional specification solid (MnO₂) and non-solid electrolyte sheet aluminum fixed capacitors (GB/T 17206-1998, idt IEC 60384-18:1993, No. 1 amendments 1998);

--- Part 18-1. Blank detail specification surface mount solid (MnO₂) electrolyte aluminum capacitors - Assessment level EZ (GB/T 17207-2012/IEC 60384-18-1:2007);

--- Part 18. Blank detail specification sheet of non-solid electrolyte aluminum capacitors - Assessment level E (GB/T 17208-1998, idt IEC 60384-18-2:1993);

--- Part 19. Sectional specification surface mount metallized polyethylene terephthalate film dielectric dc capacitors (IEC 60384-19:2006);

--- Part 19-1. Blank detail specification surface mount metallized polyethylene terephthalate film dielectric dc capacitors Assessment level E (IEC 60384-19-1:2006);

--- Part 21. Sectional specification Class 1 surface mount multilayer ceramic capacitors fixed (GB/T 21041-2007/IEC 60384-21:2004);

--- Part 21-1. Blank detail specification Class 1 surface mount multilayer ceramic capacitors - Assessment level EZ (GB/T 21038-2007/IEC 60384-21-1:2004);

--- Part 22. Sectional specification Class 2 surface mount multilayer ceramic capacitors fixed (GB/T 21042-2007/IEC 60384-22:2004);

--- Part 22-1. Blank detail specification Class 2 surface mount multilayer ceramic capacitors - Assessment level EZ (GB/T 21040-2007/IEC 60384-22-1:2004).

This is Part 16 "Fixed capacitors for use in electronic equipment" series of national

standards.

This section drafted in accordance with the rules of GB/T 1.1-2009 and GB/T 20000.2-2009 given.

This section uses the translation method identical with IEC 60384-16:2005 "Fixed capacitors for use in electronic equipment - Part 16. Sectional specification gold Metallized polypropylene film dielectric dc capacitors." Consistency correspondence between this part of international documents and normative references of our files are as follows.

- 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 2693-2001 Fixed capacitors for use in electronic equipment - Part 1. Generic specification (idt IEC 60384-1:1999);
- GB/T 10191-2011 Fixed capacitors for use in electronic equipment - Part 16-1. Blank detail specification - Fixed metallized polypropylene Film dielectric dc capacitors - Assessment levels E and EZ (IEC 60384-16-1:2005, IDT).

This part made the following editorial changes.

- Remove the IEC foreword;
- The standard term to this section.

This Part replaces GB/T 10190-1988. This section compared with the GB/T 10190-1988, the main changes are as follows.

- Increased metallized polypropylene film dielectric dc capacitors - Assessment level EZ;
- Assessment level E of A1, A2 level checks each packet IL adjusted S-3, an increase of A0 test packet;
- Increased solvent resistance test and flag solvent component tests, etc;
- Discharge test increased radial, axial leads the capacitor charging and discharging rate du/dt test value;
- Added "upper category temperature 105 °C";
- 2.2.6 Rated temperature was changed to "standard rated temperature is 85 °C; for the upper category temperature is 70 °C who rated temperature Degrees 70 °C ";
- Amplitude of the vibration test, impact test acceleration and peak acceleration collision test were adjusted to "0.75mm or 100m/s² ", " 400m/s² or 100m/s² "and" 300m/s²,500m/s²,1000m/s² ";
- Table 12 "upper category temperature Features", 70 °C when the temperature