

# JIS

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**JIS C 5101-15** : 1998

**Fixed capacitors for use in  
electronic equipment Part 15:  
Sectional specification: Fixed  
tantalum capacitors with non-solid  
or solid electrolyte**

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## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

By this Standard, **JIS C 5142 : 1991** *Fixed tantalum electrolytic capacitors with solid electrolyte for use in electronic equipment* was withdrawn and replaced.

Attention shall be drawn to the possibility that a part of this Standard may conflict with a patent right, application for a patent right after opening to the public, utility model right (including those applied before 1993-12-31) or application for registration of utility model after opening to the public which have technical properties. The Minister of International Trade and Industry and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent right after opened, utility model right or application for registration of utility model after opening to the public which have the technical properties of this kind.

**Group standards** The following standards form the specifications for the group of element specified in this Standard.

- |                 |  |
|-----------------|--|
| JIS C 5101      | <i>General rules of fixed capacitors for use in electronic equipment</i>   |
| JIS C 5101-1    | <i>Part 1: Generic specification</i>   |
| JIS C 5101-2    | <i>Part 2: Sectional specification: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors</i>                        |
| JIS C 5101-2-1  | <i>Part 2: Blank detail specification: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors. Assessment level E</i> |
| JIS C 5101-3    | <i>Part 3: Sectional specification: Fixed tantalum chip capacitors</i>   |
| JIS C 5101-3-1  | <i>Part 3: Blank detail specification: Fixed tantalum chip capacitors. Assessment level E</i>  |
| JIS C 5101-4    | <i>Part 4: Sectional specification: Aluminium electrolytic capacitors with solid and non-solid electrolyte</i>                             |
| JIS C 5101-4-1  | <i>Part 4: Blank detail specification: Aluminium electrolytic capacitors with non solid electrolyte. Assessment level E</i>                |
| JIS C 5101-4-2  | <i>Part 4: Blank detail specification: Aluminium electrolytic capacitors with solid electrolyte. Assessment level E</i>                    |
| JIS C 5101-8    | <i>Part 8: Sectional specification: Fixed capacitors of ceramic dielectric, Class 1</i>  |
| JIS C 5101-8-1  | <i>Part 8: Blank detail specification: Fixed capacitors of ceramic dielectric, class 1. Assessment level E</i>                             |
| JIS C 5101-9    | <i>Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2</i>  |
| JIS C 5101-9-1  | <i>Part 9: Blank detail specification: Fixed capacitors of ceramic dielectric, class 2. Assessment level E</i>                             |
| JIS C 5101-10   | <i>Part 10: Sectional specification: Fixed multilayer ceramic chip capacitors</i>  |
| JIS C 5101-10-1 | <i>Part 10: Blank detail specification: Fixed multilayer ceramic chip capacitors. Assessment level E</i>                                   |

- JIS C 5101-11 *Part 11: Sectional specification: Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors*
- JIS C 5101-11-1 *Part 11: Blank detail specification: Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors. Assessment level E*
- JIS C 5101-13 *Part 13: Sectional specification: Fixed polypropylene film dielectric metal foil d.c. capacitors*
- JIS C 5101-13-1 *Part 13: Blank detail specification: Fixed polypropylene film dielectric metal foil d.c. capacitors. Assessment level E*
- JIS C 5101-14 *Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*
- JIS C 5101-14-1 *Part 14: Blank detail specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains. Assessment level D*
- JIS C 5101-15 *Part 15: Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte*
- JIS C 5101-15-1 *Part 15: Blank detail specification: Fixed tantalum capacitors with non-solid electrolyte and foil electrode. Assessment level E*
- JIS C 5101-15-2 *Part 15: Blank detail specification: Fixed tantalum capacitors with non-solid electrolyte and porous anode. Assessment level E*
- JIS C 5101-15-3 *Part 15: Blank detail specification: Fixed tantalum capacitors with solid electrolyte and porous anode. Assessment level E*
- JIS C 5101-16 *Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors*
- JIS C 5101-16-1 *Part 16: Blank detail specification: Fixed metallized polypropylene film dielectric d.c. capacitors. Assessment level E*
- JIS C 5101-17 *Part 17: Sectional specification: Fixed metallized polypropylene film dielectric a.c. and pulse capacitors*
- JIS C 5101-17-1 *Part 17: Blank detail specification: Fixed metallized polypropylene film dielectric a.c. and pulse capacitors. Assessment level E*
- JIS C 5101-18 *Part 18: Sectional specification: Fixed aluminium electrolytic chip capacitors with solid and non-solid electrolyte*
- JIS C 5101-18-1 *Part 18: Blank detail specification: Fixed aluminium electrolytic chip capacitors with solid electrolyte. Assessment level E*
- JIS C 5101-18-2 *Part 18: Blank detail specification: Fixed aluminium electrolytic chip capacitors with non-solid electrolyte. Assessment level E*
- JIS C 5101-20 *Part 20: Sectional specification: Fixed metallized polyphenylene sulfide film dielectric chip d.c. capacitors*
- JIS C 5101-20-1 *Part 20: Blank detail specification: Fixed metallized polyphenylene sulfide film dielectric chip d.c. capacitors. Assessment level EZ*

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**Fixed capacitors for use  
in electronic equipment Part 15 :  
Sectional specification :  
Fixed tantalum capacitors with  
non-solid or solid electrolyte**

**Introduction** This Japanese Industrial Standard has been prepared based on **IEC 60384-15**, *Fixed capacitors for use in electronic equipment Part 15 : Sectional specification : Fixed tantalum capacitors with non-solid or solid electrolyte* published in 1982 as the first edition, Amendment 1 : 1987 and Amendment 2 : 1992 without modifying their technical contents.

The portions with dotted underlines show the matters not included in the original International Standard. The **IEC** standard number is based on the new numbering system of **IEC** standards put in force on January 1st, 1997, and the standard published before the said date is numbered by adding 60000 to the former number. This is only the change in the numbering system and the contents remain unchanged.

**Section One—General**

**1 General**

**1.1 Scope** This Standard is a sectional specification associated with the generic specification **JIS C 5101-1**, and applies to polar and bipolar tantalum electrolyte capacitors with solid and non-solid electrolyte for use in electronic equipment.

It comprises capacitors for long-life applications and capacitors for general-purpose applications. Capacitors for special purpose application may need additional requirements.

This standard covers three basic sub-families, namely:

Sub-family 1 : Fixed non-solid electrolyte tantalum capacitors with foil electrode

1A : Plain foil electrode

1B : Etched foil electrode

Sub-family 2 : Fixed non-solid electrolyte tantalum capacitors with porous anode

Sub-family 3 : Fixed solid electrolyte tantalum capacitors with porous anode

Remarks : The International Standard corresponding to this Standard is given below.

**IEC 60384-15 : 1982** *Fixed capacitors for use in electronic equipment Part 15 : Sectional specification : Fixed tantalum capacitors with non-solid or solid electrolyte*, Amendment 1 : 1987 and Amendment 2 : 1992