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INDUSTRIAL
STANDARD

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Japanese Standards Association

JIS C 5101-15-1 : 1998

**Fixed capacitors for use in
electronic equipment
Part 15: Blank detail specification:
Fixed tantalum capacitors with
non-solid electrolyte and foil
electrode
Assessment level E**

ICS 31.060.40

Descriptors : capacitors, fixed capacitors, electronic equipment and components,
tantalum, electrolytic capacitors, foil, electrodes, ratings

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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:

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 opening, 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	<i>Part 11: Sectional specification: Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors</i>

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- 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 : Blank detail specification :
Fixed tantalum capacitors with
non-solid electrolyte and foil electrode
Assessment level E**

Introduction This Japanese Industrial Standard has been prepared based on **IEC 60384-15-1**, *Fixed capacitors for use in electronic equipment Part 15 : Blank detail specification : Fixed tantalum capacitors with non-solid electrolyte and foil electrode Assessment level E* published in 1984 as the first edition, and **IEC 60384-15** Amendment 1 : 1987 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 standards published before the said date are numbered by adding 60000 to the former number. This is only the change in the numbering system and the contents remain unchanged.

Informative reference : Modification of test method for "reverse voltage" stated in this Standard is given in Amendment 1 to original International Standard IEC 60384-15, therefore this amendment is cited in this instruction.

Blank detail specification

A blank detail specification is a supplementary document to the sectional specification **JIS C 5101-15** and contains requirements for style and layout and minimum content of detail specifications. Detail specifications not complying with these requirements may not be considered as being in accordance with **JIS** nor shall they so be described.

In the preparation of detail specifications the content of sub-clause 1.4 of the sectional specification **JIS C 5101-15** shall be taken into account.

The numbers between brackets on the first page correspond to the following information which shall be inserted in the position indicated.

Identification of the detail specification

- (1) The "International Electrotechnical Commission" or the National Standards Organization under whose authority the detail specification is drafted.
- (2) The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- (3) The number and issue number of the IEC or national Generic Specification.
- (4) The National Standard or IEC number of the blank detail specification.

Identification of the capacitor

(5) A short description of the type of capacitor.

(6) Information on typical construction (when applicable).

Remarks : When the capacitors are not designed for use in printed board applications, this shall be clearly stated in the detail specification in this position.

(7) Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an appendix to the detail specification.

(8) Application or group of applications covered and/or assessment level.

Remarks : The assessment level(s) to be used in a detail specification shall be selected from the sectional specification, **JIS C 5101-15** sub-clause **3.5.4**. This implies that one blank detail specification may be used in combination with several assessment levels, provided the grouping of the tests does not change.

(9) Reference data on the most important properties, to allow comparison between the various capacitor types.

Example : Japanese Industrial Standards Committee (1)	Detail specification number (2)
Example : Fixed capacitors for use in electronic equipment Part 1 : Generic specification : JIS C 5101-1 : 1998 (3)	Example : JIS C 5101-15-1 QC 300201 (4)
Outline drawing (see Table I) (Third angle projection) (7) (Other shapes are permitted within the dimensions given)	Example : Fixed tantalum capacitors with non-solid electrolyte and foil electrode with lead or tug terminations (Sub-family 1) (5)
	Explanation of structure (6)
	Assessment level(s): Example E (8) Performance grade: Example: Long life grade

Remarks : **QC 300201** is applicable when **IEC Quality Assessment System (IECQ)** is employed.

Information on the availability of components qualified to this detail specification is given in the Qualified Products List. (*)

Note (*) This description is applicable when **IEC Quality Assessment System (IECQ)** is employed.