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JIS C 5101-13 : 2024

(JSA)

Fixed capacitors for use in electronic equipment — Part 13: Sectional specification — Fixed polypropylene film dielectric metal foil d.c. capacitors

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by Japanese Standards Association (JSA), an accredited standards development organization. This edition replaces the previous edition (**JIS C 5101-13** : 2009), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister is not responsible for identifying any of such patent rights, published patent application or utility model rights.

JIS C 5101 series consists of the following 44 parts under the general title *Fixed capacitors for use in electronic equipment* — :

JIS C 5101-1 *Part 1: Generic specification*

JIS C 5101-2 *Part 2: Sectional specification : Fixed metallized polyethylene-terephthalate film dielectric DC capacitors*

JIS C 5101-2-1 *Part 2-1: Blank detail specification : Fixed metallized polyethylene- terephthalate film dielectric d.c. capacitors — Assessment levels E and EZ*

JIS C 5101-3 *Part 3: Sectional specification — Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte*

JIS C 5101-3-1 *Part 3-1: Blank detail specification — Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte — Assessment level EZ*

JIS C 5101-4 *Part 4: Sectional specification — Fixed aluminium electrolytic capacitors with solid (MnO_2) and non-solid electrolyte*

JIS C 5101-4-1 *Part 4-1: Blank detail specification — Fixed aluminium electrolytic capacitors with non-solid electrolyte — Assessment level EZ*

JIS C 5101-4-2 *Part 4-2: Blank detail specification — Fixed aluminium electrolytic capacitors with solid (MnO_2) electrolyte — Assessment level EZ*

JIS C 5101-8 *Part 8: Sectional specification : Fixed capacitors of ceramic dielectric, Class 1*

JIS C 5101-8-1 *Part 8-1: Blank detail specification : Fixed capacitors of ceramic dielectric, Class 1 Assessment level EZ*

JIS C 5101-9 *Part 9: Sectional specification : Fixed capacitors of ceramic dielectric, Class 2*

JIS C 5101-9-1 *Part 9-1: Blank detail specification : Fixed capacitors of ceramic dielectric, Class 2 Assessment level EZ*

JIS C 5101-11 *Part 11: Sectional specification — Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors*

JIS C 5101-11-1 *Part 11-1: Blank detail specification — Fixed polyethylene-terephthalate film dielectric metal foil d.c. capacitors — Assessment level EZ*

JIS C 5101-13 *Part 13: Sectional specification — Fixed polypropylene film dielectric metal foil d.c. capacitors*

JIS C 5101-13-1 *Part 13-1: Blank detail specification — Fixed polypropylene film dielectric metal foil d.c. capacitors — Assessment levels E and EZ*

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 14-1: Blank detail specification — Fixed capacitors for electromagnetic interference suppression and connection to the supply mains — Assessment level DZ*

JIS C 5101-14-2 *Part 14-2: Blank detail specification — Fixed capacitors for electromagnetic interference suppression and connection to the supply mains — Safety tests only*

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 DC capacitors*

JIS C 5101-16-1 *Part 16-1: Blank detail specification : Fixed metallized polypropylene film dielectric d.c. capacitors — Assessment levels E and EZ*

JIS C 5101-17 *Part 17: Sectional specification — Fixed metallized polypropylene film dielectric AC and pulse capacitors*

JIS C 5101-17-1 *Part 17-1: Blank detail specification : Fixed metallized polypropylene film dielectric a.c. and pulse capacitors — Assessment levels E and EZ*

JIS C 5101-18 *Part* 18*: Sectional specification — Fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte*

JIS C 5101-18-1 *Part 18-1: Blank detail specification — Fixed aluminium electrolytic surface mount capacitors with solid (MnO2) electrolyte — Assessment level EZ*

JIS C 5101-18-2 *Part 18-2: Blank detail specification — Fixed aluminium electrolytic surface mount capacitors with non-solid electrolyte — Assessment level EZ*

JIS C 5101-20 *Part 20: Sectional specification — Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors*

JIS C 5101-20-1 *Part 20-1: Blank detail specification — Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors — Assessment level EZ*

JIS C 5101-21 *Part 21: Sectional specification — Fixed surface mount multilayer capacitors of ceramic dielectric, Class 1*

JIS C 5101-21-1 *Part 21-1: Blank detail specification : Fixed surface mount multilayer capacitors of ceramic dielectric, Class 1 — Assessment level EZ*

JIS C 5101-22 *Part 22: Sectional specification — Fixed surface mount multilayer capacitors of ceramic dielectric, Class 2*

JIS C 5101-22-1 *Part 22-1: Blank detail specification : Fixed surface mount multilayer capacitors of ceramic dielectric, Class 2 — Assessment level EZ*

JIS C 5101-23 *Part 23: Sectional specification — Fixed metallized polyethylene naphthalate film dielectric surface mount d.c. capacitors*

JIS C 5101-23-1 *Part 23-1: Blank detail specification — Fixed surface mount metallized polyethylene naphthalate film dielectric DC capacitors — Assessment level EZ*

JIS C 5101-24 *Part 24: Sectional specification — Fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte*

JIS C 5101-24-1 *Part 24-1: Blank detail specification — Surface mount fixed tantalum electrolytic capacitors with conductive polymer solid electrolyte — Assessment level EZ*

JIS C 5101-25 *Part 25: Sectional specification — Fixed aluminium electrolytic surface mount capacitors with conductive polymer solid electrolyte*

JIS C 5101-25-1 *Part 25-1: Blank detail specification — Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte — Assessment level EZ*

JIS C 5101-26 *Part 26: Sectional specification — Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte*

JIS C 5101-26-1 *Part 26-1: Blank detail specification — Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte — Assessment level EZ*

Blank

Fixed capacitors for use in electronic equipment — Part 13: Sectional specification — Fixed polypropylene film dielectric metal foil d.c. capacitors

Introduction

This Japanese Industrial Standard has been prepared based on IEC 60384-13 : 2020, Edition 5, to refer to the latest edition of the parent standard JIS C 5101-1 cited in this Standard, with changes in the relevant clause numbers in which the technical content has been modified.

The dotted underlines indicate changes from the corresponding International Standard. Cross-references showing the correspondence of clause numbers, etc. between this Standard and the previous edition is given in Annex X for reference. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies preferred ratings and characteristics, selects from JIS C 5101-1 : 2023 the appropriate quality assessment procedures, tests and measuring methods, and gives general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this sectional specification are of an equal or higher performance level. Lower performance levels are not permitted.

This Standard applies to fixed direct current capacitors, using as dielectric a polypropylene film with electrodes of thin metal foils. The capacitors covered by this Standard are intended for use in electronic equipment.

Capacitors for electromagnetic interference suppression are not included, but are covered by JIS C 5101-14.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

IEC 60384-13 : 2020 *Fixed capacitors for use in electronic equipment — Part 13: Sectional specification — Fixed polypropylene film dielectric metal foil d.c. capacitors* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21-1.

2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the