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electrical purposes**

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In the event of any doubts arising as to the contents,  
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## Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Electrical Insulating and Advanced Performance Materials Industrial Association (JEIA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS C 2151**:2006 is replaced with this Standard.

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Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Testing methods of plastic films for electrical purposes

## Introduction

This Japanese Industrial Standard has been prepared based on **IEC 60674-2** : 2016, Edition 2, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

## 1 Scope

This Standard specifies testing methods for plastic films for electrical purposes. The plastic films covered by this Standard are those intended for use as electric insulation in electrical equipment, electronic equipment, wires, and for other general electrical insulation purposes, and those intended for use as dielectric in capacitors.

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

IEC 60674-2 : 2016 *Specification for plastic films for electrical purposes — Part 2 : Methods of test* (MOD)

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

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent edition (including amendments) shall be applied.

JIS B 7502 *Micrometers*

JIS C 2107 : 2011 *Methods of test for pressure-sensitive adhesive tapes for electrical purposes*

**NOTE** Corresponding International Standard : IEC 60454-2 : 2007 *Pressure-sensitive adhesive tapes for electrical purposes — Part 2 : Methods of test* (MOD)

JIS C 2110-1 *Solid electrical insulating materials — Test methods for electric strength — Part 1 : Tests at power frequencies*

**NOTE** Corresponding International Standard : IEC 60243-1 : 2013 *Electric strength of insulating materials — Test methods — Part 1 : Tests at*

*power frequencies (IDT)*

JIS C 2110-2 *Solid electrical insulating materials — Test methods for electric strength — Part 2 : Tests using direct voltage*

NOTE Corresponding International Standard : IEC 60243-2 *Electric strength of insulating materials — Test methods — Part 2 : Additional requirements for tests using direct voltage* (IDT)

JIS C 2138 *Electrical insulating materials — Methods for the determination of the relative permittivity and dielectric dissipation factor*

NOTE Corresponding International Standard : IEC 60250 :1969 *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths* (MOD)

JIS C 2139-3-1 *Dielectric and resistive properties of solid insulating materials — Part 3-1 : Determination of resistive properties (DC methods) — Volume resistance and volume resistivity*

NOTE Corresponding International Standard : IEC 62631-3-1 *Dielectric and resistive properties of solid insulating materials — Part 3-1 : Determination of resistive properties (DC methods) — Volume resistance and volume resistivity — General method* (IDT)

JIS C 2139-3-2 *Dielectric and resistive properties of solid insulating materials — Part 3-2 : Determination of resistive properties (DC methods) — Surface resistance and surface resistivity*

NOTE Corresponding International Standard : IEC 62631-3-2 *Dielectric and resistive properties of solid insulating materials — Part 3-2 : Determination of resistive properties (DC methods) — Surface resistance and surface resistivity* (MOD)

JIS C 2142 *Solid electrical insulating materials — Standard conditions for use prior to and during the testing*

NOTE Corresponding International Standard : IEC 60212 : 2010 *Standard conditions for use prior to and during the testing of solid electrical insulating materials* (MOD)

JIS C 2143-1 *Electrical insulating materials — Thermal endurance properties — Part 1 : Ageing procedures and evaluation of test results*

NOTE Corresponding International Standard : IEC 60216-1 : 2013 *Electrical insulating materials — Thermal endurance properties — Part 1 : Ageing procedures and evaluation of test results* (IDT)

JIS C 2143-2 *Electrical insulating materials — Thermal endurance properties — Part 2 : Determination of thermal endurance properties — Choice of test criteria*

NOTE Corresponding International Standard : IEC 60216-2 : 2005 *Electrical insulating materials — Thermal endurance properties — Part 2 : Determination of thermal endurance properties of electrical insulating mate-*