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SPECIFICATION

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PAS 61249-3-1

Pre-Standard

First edition
2007-05

**Materials for printed boards and other
interconnecting structures –**

**Part 3-1:
Copper-clad laminates for flexible boards
(adhesive and non-adhesive types)**



JPCA

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Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

Part 3-1: Copper-clad laminates for flexible boards (Adhesive and non-adhesive types)

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IEC-PAS 61249-3-1 was submitted by the JPCA (Japan Electronics Packaging and Circuits Association) and has been processed by IEC technical committee 91: Electronics assembly technology.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document:

Draft PAS	Report on voting
91/616/NP	91/644/RVN

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MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

Part 3-1: Copper-clad laminates for flexible boards (Adhesive and non-adhesive types)

1 Scope

This PAS specifies the properties of copper-clad laminates used for flexible boards for both adhesive and non-adhesive types.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

JPCA-TD01, *Terms and definition for printed circuits*

JIS C 5603, *Terms and definition for printed circuits*

JIS C 6471, *Test methods of copper-clad laminates for flexible printed wiring boards*

JIS C 6472, *Copper-clad laminates for flexible printed wiring boards (Polymer film, Polyimide film)*

JIS C 6515, *Copper foil for printed wiring boards*

IEC 60194, *Printed board design, manufacture and assembly – Terms and definitions*

IPC-4204, *Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Circuitry*

ASTM D149, *Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies*

ASTM D150, *Standard Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation*

ASTM D882, *Standard Test Method for Tensile Properties of Thin Plastic Sheeting*

3 Terms and definitions

For the purposes of this document, the following terms and definitions, as well as those mentioned in IEC 60194, JIS C 5603 and JPCA-TD01, apply.

3.1

machine direction (MD)

longitudinal direction in production of film, copper foil, and copper-clad laminate

3.2

transverse direction (TD)

transverse direction in production of film, copper foil, and copper-clad laminate

4 Designation of copper-clad laminates

The designation of types of laminates shall be made in the following way. Constituent designations are connected by hyphens.