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Australian Standard 1522, Part 2–1977

METAL-CLAD BASE MATERIALS FOR PRINTED CIRCUIT BOARDS

Part 2–SPECIFICATIONS

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Associated Chambers of Manufactures of Australia

Australian Telecommunications Development Association

Department of Manufacturing Industry

Department of Transport

Electronics Association Australia

Institution of Radio and Electronics Engineers, Australia

Telecom Australia

This standard, prepared by Committee TE/6, Printed Circuits, was approved on behalf of the Council of the Standards Association of Australia on 3 August 1976, and was published on 1 September 1977.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

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AUSTRALIAN STANDARD SPECIFICATION

METAL-CLAD BASE MATERIALS FOR PRINTED CIRCUIT BOARDS

Part 2

SPECIFICATIONS

AS 1522, Part 2–1977

First published 1977

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PREFACE

This standard was prepared by the Association's Committee on Printed Circuits.

The standard is technically identical with IEC 249-2, as supplemented by IEC 249-2A, 2B, 2C, 2D and 2E and amended by the draft 52(Central Office)117 as accepted at the meeting of IEC/TC 52, Printed Circuits, at its May 1976 meeting.

In separate sections, this standard specifies requirements for the properties of a variety of metal-clad laminated plastics sheet, covering materials and construction, electrical and mechanical properties and acceptance testing. The purpose of the standard is to describe materials of uniform quality which will be suitable for use as base materials for the manufacture of printed circuit boards.

The terms used in this standard are defined in AS ...., Terms and Definitions for Printed Wiring.* Test methods are not included in this Part; for these reference must be made to Part 1 of this standard which describes methods for the physical properties of metal-clad base materials in sheet or roll form, irrespective of the nature of the basic insulating material. Part 1 does not, however, give guidance on test methods for printed circuit boards; this will be the subject of a further standard.

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* In course of preparation.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard Specification for METAL-CLAD BASE MATERIALS FOR PRINTED CIRCUIT BOARDS

PART 2 — SPECIFICATIONS

SECTION 1 — SPECIFICATION 1. PHENOLIC CELLULOSE PAPER COPPER-CLAD LAMINATED SHEET, HIGH ELECTRICAL QUALITY

1.1 SCOPE. This Section specifies requirements for properties of phenolic cellulose paper copper-clad laminated sheet, high electrical quality.

NOTES:

1. To designate this material the reference AUS-1-PF-CP-Cu may be used.
2. Test methods for determining compliance with this specification are given in Part 1 of this standard (see also Clause 1.7).

1.2 MATERIALS AND CONSTRUCTION.

1.2.1 General. The sheet consists of an insulating base with metal foil bonded to one or both sides.

1.2.2 Insulating Base. Phenolic resin bonded cellulose paper laminate.

1.2.3 Metal Foil. Copper, in accordance with Table 1.1.

TABLE 1.1

MASS AND THICKNESS OF COPPER FOIL

Grade	Mass per unit area		Thickness	
	Nominal g/m^2	Deviation %	Nominal μm	Deviation μm
a	305	± 15	35	+ 10 − 5
b	610	± 15	70	+ 18 − 8