

Australian Standard[®]

**Electromechanical components
for electronic equipment—
Basic testing procedures and
measuring methods**

**Part 2: General examination,
electrical continuity and contact
resistance tests, insulation tests
and voltage stress tests**

This Australian Standard was prepared by Committee ET/5, Environmental Testing Procedures. It was approved on behalf of the Council of Standards Australia on 5 June 1989 and published on 6 November 1989.

The following interests are represented on Committee ET/5:

Aerospace Technologies of Australia
Confederation of Australian Industry
Department of Administrative Services
Department of Defence
Electricity Supply Association of Australia
Institution of Engineers, Australia
National Association of Testing Authorities
Society of Automotive Engineers, Australasia
Telecom Australia
University of New South Wales

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This Standard was issued in draft form for comment as DR 83107.

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First published as AS 3726.2—1989.

PREFACE

This Standard was prepared by the Standards Australia Committee on Environmental Testing Procedures. Part 2 is identical with IEC 512, Part 2 (1985) issued by the IEC Committee TE/48, Electromechanical Components for Electronic Equipment, with the following scope and terms of reference:

To prepare international Standards regarding components, having an inherent electromechanical connecting or switching function, intended for use in equipment or telecommunication and in electronic devices employing similar techniques.

NOTES:

1. RF connectors will not be dealt with by this Technical Committee.
2. Sockets for components such as crystals or electronic tubes will be considered.

The purpose of Part 2 is to specify tests that shall be used, when required, by detail specifications for electromechanical components, having a connecting or switching function, in equipment for telecommunications or similar electronic devices. Part 2 includes tests for electrical continuity, contact resistance, insulation resistance, and voltage stress.

The page numbers of the IEC English text are given on the bottom left hand corner of each page of the Standard.

For the purpose of this Australian Standard, the text of the IEC Publication used herein should be modified as follows:

- (a) *Terminology*: The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.
- (b) *References*: The references to international Standards should be replaced by references to Australian Standards as follows:

<i>Reference to international Standard</i>	<i>Appropriate Australian Standard</i>
IEC	AS
50 International Electrotechnical Vocabulary (IEV)	1852 International electrotechnical vocabulary
68 Basic environmental testing procedures	1099 Basic environmental testing procedures for electrotechnology
270 Partial discharge measurements	1018 Partial discharge measurements

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STANDARDS AUSTRALIA

Australian Standard

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testing procedures and measuring methods****Part 2: General examination, electrical continuity and contact
resistance tests, insulation tests and voltage stress tests**

SECTION ONE – GENERAL EXAMINATION

Scope

The tests contained herein, when required by the detail specification, shall be used for electro-mechanical components within the scope of Technical Committee No.48*. They may also be used for similar devices when specified in a detail specification.

1. Test 1a: Visual examination**1.1 Object**

The object of this test is to detail standard methods for the visual examination of electro-mechanical components within the scope of Technical Committee No.48*.

1.2 General

The visual examination checks identification, appearance, workmanship and finish of an item against the relevant specification. Optical aids, as specified in Sub-clause 1.4, should be used when specified by the detail specification.

The visual examination is to a certain extent a subjective method. Care must be taken to come to a fair judgement. Defects, deviations from a given standard or changes due to stresses must be carefully differentiated according to their importance or significance.

1.3 Features to be examined

The following features shall be examined:

- a) workmanship and finish;
- b) marking;
- c) materials;
- d) surface finish, for example:
 - traces of corrosion,
 - colour (comparison with applicable colour standards or samples),

* *Scope of Technical Committee No. 48:* To prepare international standards regarding components having an inherent electro-mechanical connecting or switching function, intended for use in equipment for telecommunication and in electronic devices employing similar techniques.

Notes 1. – R.F. connectors will not be dealt with by this Technical Committee as they will be covered by Technical Committee No.46 together with r.f. cables.

2. – Sockets for components such as crystals or electronic tubes will be considered in co-operation with the relevant Technical Committee.