

Australian Standard<sup>®</sup>

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**SOLDERLESS CONNECTIONS**

**Part 1—SOLDERLESS WRAPPED  
CONNECTIONS—  
GENERAL  
REQUIREMENTS,  
TEST METHODS AND  
PRACTICAL GUIDANCE**

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This Australian Standard was prepared by Committee TE/6/1, Printed Circuit Board Connectors. It was approved on behalf of the Council of the Standards Association of Australia on 4 May 1987 and published on 1 June 1987.

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The following interests are represented on Committee TE/6/1:

Australian Tin Information Centre  
Confederation of Australian Industry  
Department of Defence  
Department of Science and Technology  
Institution of Radio and Electronics Engineers Australia  
Telecom Australia

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## PREFACE

This Standard was prepared by the Association's Committee on Printed Circuit Connectors. It is identical with and has been reproduced from IEC Publication 352-1 (1983), issued by IEC Committee TC 48, Electro-mechanical Components for Electronic Equipment.

The purpose of the Standard is to specify methods for determining the suitability of solderless wrapped connections for telecommunications equipment and similar electronic devices under specified mechanical, electrical and atmospheric conditions and to provide a means of comparing test results where tools, used to make the connections, are of different designs or manufacture.

The Standard includes requirements, tests and information on practical guidance.

Two separate test schedules are provided: the first is a basic test schedule which applies to solderless wrapped connections which conform to all requirements, and the second is a schedule which applies to solderless wrapped connections which comply in all details except for the size or material of the wrapping wire or the post involved. The basic schedule applies to single solid round wires of 0.25 mm minimum nominal diameter and appropriately designed posts. To ensure electrically stable connections under prescribed environmental conditions, in addition to the test procedures information is provided on materials and the results of practical experience.

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

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

Reference to International Standard	Approximate Australian Standard
IEC 50 (581) International Electro-technical Vocabulary Electromechanical Components for Electronic Equipment.	AS 185 (31) International Electro-technical Vocabulary Electromechanical Components for Electronic Equipment.
IEC 68 Basic Electronic Testing Procedures Part 1: General.	AS 1099 Basic Electronic Testing Procedures for Electro-technology Part 1: General.
ISO 468 Surface Roughness—Parameters, Their Values and General Rules for Specifying Requirements.	AS 1965 The Measurement of Surface Roughness With Direct-reading Stylus Electronic Instruments.
ISO 6507/1 Metallic Materials—Hardness Test—Vickers Test Part 1: HV 5 to HV 100.	AS 1817 Method for Vickers Hardness Test Part 1: Testing of Metals.

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## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
**SOLDERLESS CONNECTIONS****PART 1—SOLDERLESS WRAPPED CONNECTIONS—GENERAL REQUIREMENTS,  
TEST METHODS AND PRACTICAL GUIDANCE**

## SECTION ONE — GENERAL

**1. Scope**

This standard is applicable to solderless wrapped connections made with single solid round wires with nominal diameters of 0.25 mm (0.01 in) minimum and appropriately designed posts for use in telecommunications equipment and in electronic devices employing similar techniques.

Information on materials and data from industrial experience is included in addition to the test procedures to provide electrically stable connections under prescribed environmental conditions.

**2. Object**

To determine the suitability of solderless wrapped connections under specified mechanical, electrical and atmospheric conditions.

To provide a means of comparing test results where the tools used to make the connections are of different designs or manufacture.

**3. Terminology**

The terms and definitions used in this standard are given in IEC Publication 50(581): International Electrotechnical Vocabulary (IEV), Chapter 581: Electromechanical Components for Electronic Equipment.

IEC Publication 512: Electromechanical Components for Electronic Equipment; Basic Testing Procedures and Measurement Methods, also contains some applicable terms and definitions.

For the purposes of this standard, the following additional terms and definitions shall apply: