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Australian Standard 1541, Part 7—1983

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT

Part 7—FIXED POLYSTYRENE FILM DIELECTRIC DIRECT CURRENT CAPACITORS

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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The following interests are represented on Committee TE/2:

Confederation of Australian Industry

Department of Industry and Commerce

Institution of Radio and Electronics Engineers Australia

Telecom Australia

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AUSTRALIAN STANDARD

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT

Part 7
FIXED POLYSTYRENE FILM DIELECTRIC DIRECT CURRENT CAPACITORS

AS 1541, Part 7—1983

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PREFACE

This standard was prepared by the Association's Committee on Capacitors and Resistors. It is technically identical with IEC 384-7 issued by the International Electrotechnical Commission and acknowledgement is accordingly made to the IEC.

Deviations from IEC 384-7 are editorial in nature and were necessary only because IEC 384-7 calls up IEC 384-1:1972 whereas the Australian equivalent AS 1541, Part 1 is arranged in the manner adopted by IEC 384-1:1982. The references to clause numbers of IEC 384-1 were therefore replaced by the equivalent reference to AS 1541, Part 1, as indicated by the use of a marginal bar alongside the amended text. Similarly, references to other IEC Publications have been replaced wherever possible by the Australian equivalent as indicated in Clause 3.

The purpose of the standard is to establish preferred ratings and characteristics for fixed d.c. capacitors with polystyrene film dielectric and metal foil electrodes which are intended for use in electronic equipment. Appropriate test methods, test severities and performance requirements are given. Detail specifications for particular varieties of polystyrene film dielectric capacitors based on this standard may contain additional or more severe requirements but should not omit or diminish any relevant requirement or severity.

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Australian Standard
for
FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT

PART 7—SECTIONAL SPECIFICATION—FIXED POLYSTYRENE FILM DIELECTRIC DIRECT CURRENT CAPACITORS SELECTION OF METHODS OF TEST AND GENERAL REQUIREMENTS

SECTION 1. GENERAL

1. Scope

This standard relates to fixed d.c. capacitors, containing a dielectric of polystyrene film, and electrodes of thin metal foils. They are intended for use in electronic equipment.

Capacitors for a reactive power exceeding 200 var are not covered by this standard.

Capacitors for radio interference suppression are not included in this standard but are covered by AS 1541, Part 14.

2. Object

The object of this standard is to prescribe preferred ratings and characteristics, to select from AS 1541, Part 1 the appropriate methods of test and to give general performance requirements for this type of capacitor.

Test severities and requirements prescribed in detail specifications referring to this sectional specification have to be of equal or higher level, because degradations are normally not permitted.

3. Referenced documents

AS 1099	Basic Environmental Testing Procedures for Electrotechnology (technically identical to IEC 68)
AS 1541	Fixed Capacitors for Use in Electronic Equipment. Part 1—Terminology and Methods of Test (technically identical to IEC 384-1) Part 14—Fixed Capacitors for Radio Interference Suppression (technically identical to IEC 384-14)
AS 2065	Preferred Number Series for Resistors and Capacitors (technically identical to IEC 63)
AS 2066	Marking Codes for Resistors and Capacitors (technically identical to IEC 62)
SAA MP19	Report on Preferred Numbers and Their Use (technically identical to ISO 3)

4. Terminology

In addition to the applicable terms and definitions of AS 1541, Part 1 the following definition applies:

4.1 *Stability class*

The stability class is defined by the tolerance on the temperature coefficient together with the permissible change of capacitance after defined tests. The stability class is stated in the detail specification.

Table I, shows the stability classes.