

AS 1099.2.27—1988

Australian Standard[®]

**BASIC ENVIRONMENTAL
TESTING PROCEDURES FOR
ELECTROTECHNOLOGY
Part 2.27—TEST Ea: SHOCK**

This Australian Standard was prepared by Committee ET/5, Environmental Testing Procedures. It was approved on behalf of the Council of the Standards Association of Australia on 21 April 1988 and published on 15 July 1988.

The following interests are represented on Committee ET/5:

Aerospace Industries of Australia
Confederation of Australian Industry
Department of Defence
Department of Housing and Construction
Electricity Supply Association of Australia
National Association of Testing Authorities
Society of Automotive Engineers, Australasia
Telecom Australia
The University of New South Wales

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 1099.2.27—1988

Australian Standard[®]

**BASIC ENVIRONMENTAL
TESTING PROCEDURES FOR
ELECTROTECHNOLOGY
Part 2.27—TEST Ea: SHOCK**

First published as AS 1099.2Ea—1971.
Revised and redesignated AS 1099.2.27—1988.

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 5115 1

PREFACE

This Standard was prepared by the Association's Committee on Environmental Testing Procedures to supersede AS 1099.2Ea—1971, *Test Ea, Impact—Shock*. This edition is identical with IEC 68-2-27 (Third edition). The IEC page numbers are reproduced at the bottom left hand corner for reference.

The object of the Standard is to determine the suitability of components and equipment for applications where they are subjected to non-repetitive mechanical shocks to assess their structural integrity as a means of quality control.

The shocks are not intended to necessarily be those encountered in practice. Wherever possible, the test severity and the shape of the pulse applied should be such as to reproduce the effects of transport or operational environments to which the specimen will be subjected or to satisfy design requirements.

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

Terminology: The words 'Australian Standard' should replace the words ISO Standard or IEC Publication wherever they appear.

References: The references to International Standards shall be replaced by references to Australian Standards as follows:

<i>Reference to International Standards</i>		<i>Appropriate Australian Standard</i>	
IEC 68	Basic environmental testing procedures	AS 1099	Basic environmental testing procedures for electrotechnology
68-1	Part 1: General and guidance (1982)	AS 1099.1	Part 1: General
68-2	Part 2: Tests (1986)	AS 1099.2	Part 2: Tests
68-2-29	Test Eb and guidance: Bump (1986)	AS 1099.2.29	Test Eb: Bump
68-2-31	Test Ec: Drop and topple (1969)	AS 1099.2.31	Test Ec: Drop and topple
68-2-32	Test Ed: Free fall (1975)	AS 1099.2.32	Test Ed: Free fall
68-2-47	Mounting of components, equipment and other articles for dynamic tests	AS 1099.2.47	Mounting of components, equipment and other articles for dynamic tests
68-2-55	Test Ee and guidance: Bounce	AS 1099.2.55	Test Ee: Bounce
IEC 721.3.	Classification of environmental conditions, Part 3: Classification of groups of environmental parameters and their severities (1984)		No Australian equivalent
721.3.1	Storage (1987)		
721.3.5	Ground vehicle installation (1985)		
ISO 2041	Vibration and shock—Vocabulary (1975)	AS 2606	Vibration and shock—Vocabulary (1975)

CONTENTS

Clause		
1.	Object	4
2.	General description	4
3.	Definitions	5
4.	Description of test apparatus	5
5.	Severities	7
6.	Pre-conditioning	7
7.	Initial measurements	7
8.	Conditioning	7
9.	Recovery	8
10.	Final measurements	8
11.	Information to be given in the relevant specification	8
APPENDIX A	— Guidance	9
APPENDIX B	— Shock response spectra and other characteristics of pulse shapes	15
APPENDIX C	— Comparison between impact tests	19
FIGURES	20

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-