

AS 60068.2.27—2003
IEC 60068-2-27:1987

AS 60068.2.27

Australian Standard™

Environmental testing

**Part 2.27: Tests—Test Ea and guidance:
Shock**

This Australian Standard was prepared by Committee EL-026, Protective Enclosures and Environmental Testing for Electrical/Electronic Equipment. It was approved on behalf of the Council of Standards Australia on 10 April 2003 and published on 16 May 2003.

The following are represented on Committee EL-026:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturer's Association
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Electricity Supply Association of Australia
Testing Interests (Australia)

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

AS 60068.2.27—2003

Australian Standard™

Environmental testing

Part 2.27: Tests—Test Ea and guidance: Shock

Originated as AS 1099.2Ea—1971.
Previous edition AS 1099.2.27—1988.
Revised and redesignated as AS 60068.2.27—2003.

COPYRIGHT

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5263 2

PREFACE

This Standard was prepared by the Standards Australia Committee EL-026, Protective Enclosures and Environmental Testing for Electrical/Electronic Equipment to supersede AS 1099.2.27—1988, *Basic environmental testing procedures for electrotechnology* Part 2.27: *Test Ea—Shock*.

The objective of this Standard is to provide the electrotechnology industry with a complete set of environmental test procedures published as a series under AS 60068 *Environmental testing*. This Standard is Part 1 of that series.

This Standard is identical with, and has been reproduced from, IEC 60068-2-27:1987, *Environmental testing—Part 2-27: Tests—Test Ea and guidance: Shock*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this international standard’ should read ‘this Australian Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
- (d) Any French text on figures should be ignored.

In this Standard, the following print types are used:

- requirements proper: in arial type;
- *test specifications: in italic type;*
- explanatory matter: in smaller arial type.

Any international Standard referenced should be replaced by an equivalent Australian Standard when one is available. The availability of equivalent Australian Standards can be determined either from the Standards Australia catalogue or from the Standards Australia website (www.standards.com.au).

CONTENTS

	<i>Page</i>
Introduction.....	iv
1 Scope.....	1
2 General description	1
3 Definitions	1
3.1 Fixing point	1
3.2 Checkpoint	2
3.3 Shock severity.....	2
3.4 Velocity change.....	2
3.5 g_n	2
4 Description of test apparatus	2
4.1 Required characteristics	2
4.1.1 Basic pulse shapes.....	2
4.1.2 Velocity change tolerances.....	2
4.1.3 Transverse motion.....	3
4.2 Measuring system	3
4.3 Mounting	3
5 Severities	3
6 Preconditioning	4
7 Initial measurements	4
8 Conditioning	4
8.1 Application of shocks.....	4
8.2 Operating mode and functional monitoring.....	4
9 Recovery.....	5
10 Final measurements	5
11 Information to be given in the relevant specification	5
Annex A Guidance	6
Annex B Shock response spectra and other characteristics of pulse shapes	11
Annex C Comparison between impact tests	15

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
-