



UL 1557

STANDARD FOR SAFETY

Electrically Isolated Semiconductor Devices

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UL Standard for Safety for Electrically Isolated Semiconductor Devices, UL 1557

Sixth Edition, Dated March 19, 2018

SUMMARY OF TOPICS:

The Sixth Edition of the Standard for Safety for Electrically Isolated Semiconductor Devices, UL 1557, has been issued to reflect the latest ANSI approval date and to incorporate the following proposal:

- ***Adding dc production line dielectric testing.***

The new requirements are substantially in accordance with Proposal(s) on this subject dated February 9, 2018.

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MARCH 19, 2018

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ANSI/UL 1557-2018

UL 1557

Standard for Electrically Isolated Semiconductor Devices

First Edition – May, 1984
Second Edition – May, 1993
Third Edition – May, 1997
Fourth Edition – June, 2006
Fifth Edition – December, 2011

Sixth Edition

March 19, 2018

This ANSI/UL Standard for Safety consists of the Sixth Edition.

The most recent designation of ANSI/UL 1557 as an American National Standard (ANSI) occurred on March 19, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements apply to semiconductor devices of the isolated-mounting type – thyristors, transistors, diodes, and the like, and hybrid modules consisting of combinations of these devices.

1.2 These requirements do not apply to snubber and commutation circuits associated with thyristors, transistors or other analog semiconductor devices.

1.3 These requirements cover the isolation performance of thyristors, transistors, diodes, and the like, and their combination in module packages and constructional features that are pertinent to that performance.

1.4 These requirements apply to isolated semiconductors for use as components in products. Compliance of an isolated semiconductor with these requirements does not determine that the semiconductor is acceptable for use as a component of an end product without further investigation. The acceptability of a semiconductor in any particular product depends upon its acceptability for continued use under the conditions that prevail in actual service.

2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this Standard shall comply with the requirements for that component. See Appendix A, for a list of standards covering components generally used in the products covered by this Standard.

2.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.