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## Semiconductor devices – Flexible and stretchable semiconductor devices – Part 3: Evaluation of thin film transistor characteristics on flexible substrates under bulging

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### Part 3: Evaluation of thin film transistor characteristics on flexible substrates under bulging

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International Standard IEC 62951-3 has been prepared by IEC technical committee 47: Semiconductor devices.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
47/2492/FDIS	47/2511/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62951 series, published under the general title *Semiconductor devices – Flexible and stretchable semiconductor devices*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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## INTRODUCTION

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## **SEMICONDUCTOR DEVICES – FLEXIBLE AND STRECHABLE SEMICONDUCTOR DEVICES –**

### **Part 3: Evaluation of thin film transistor characteristics on flexible substrates under bulging**

#### **1 Scope**

This part of IEC 62951 specifies the method for evaluating thin film transistor characteristics on flexible substrates under bulging. The thin film transistor is fabricated on flexible substrates, including polyethylene terephthalate (PET), polyimide (PI), elastomer and others. The stress is applied by applying a uniformly-distributed pressure to the flexible substrate using the equipment.

#### **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62047-17, *Semiconductor devices – Micro-electromechanical devices – Part 17: Bulge test method for measuring mechanical properties of thin films*

IEC 60747-8, *Semiconductor devices – Discrete devices – Part 8: Field-effect transistors*