IEC 61189-2-804

Edition 1.0 2023-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Test methods for electrical materials, printed board and other interconnection structures and assemblies –
Part 2-804: Test methods for time to delamination – T260, T288, T300

Méthodes d'essai pour les matériaux électriques, les cartes imprimées et autres structures d'interconnexion et ensembles –
Partie 2-804: Méthodes d'essai pour le temps de décollement interlaminaire – T260, T288, T300

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IEC 61189-2-804 has been prepared by IEC technical committee TC 91: Electronics assembly technology. It is an International Standard.

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

Draft	Report on voting
91/1874/FDIS	91/1894/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 61189 series, published under the general title *Test methods for electrical materials, printed boards and other interconnection structures and assemblies*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS AND OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –

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1 Scope

This part of IEC 61189 specifies a test method to determine the time to delamination of base materials and printed boards using a thermomechanical analyser (TMA). Temperatures used for this evaluation are typically 260 °C, 288 °C and 300 °C, but are not limited to these values.

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 60194-1, *Printed board design, manufacture and assembly – Vocabulary – Part 1: Common usage in printed board and electronic assembly technologies*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60194-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

4 Specimen preparation

Unless otherwise specified, a minimum of two specimens shall be tested. These specimens shall be taken from random locations of the material to be evaluated.

The edges of each specimen shall be smooth, this may necessitate sanding after etching.

5 Test specimens

Test specimens shall be unclad laminate material or a printed circuit board. It is acceptable to take specimens from multilayer printed boards with internal conductors present. For determination of a multilayer board’s bond integrity, presence of internal conductors is preferred.

All copper shall be etched from the test specimens using standard industry methods.

The specimen shall be taken at a distance ≥ 25 mm from the edge of the material / circuit board being evaluated. The dimensions of the specimens shall be approximately 6,35 mm × 6,35 mm × thickness of the sample.