

Printed boards and printed board assemblies — Design and use —

Part 5-4: Attachment (land/joint) considerations — Components with J leads on two sides

The European Standard EN 61188-5-4:2007 has the status of a
British Standard

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National foreword

This British Standard is the UK implementation of EN 61188-5-4:2007. It is identical to IEC 61188-5-4:2007.

The UK participation in its preparation was entrusted to Technical Committee EPL/501, Electronic assembly technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

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Components with J leads on two sides
(IEC 61188-5-4:2007)**

Cartes imprimées et
cartes imprimées équipées -
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sur les liaisons pistes-soudures -
Composants à sorties en J
sur deux côtés
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Leiterplatten und Flachbaugruppen -
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Teil 5-4: Betrachtungen zur Montage
(Anschlussfläche/Verbindung) -
Bauelemente mit
J-förmigen Anschlüssen
auf zwei Seiten
(IEC 61188-5-4:2007)

This European Standard was approved by CENELEC on 2007-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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Foreword

The text of document 91/704/FDIS, future edition 1 of IEC 61188-5-5, prepared by IEC TC 91, Electronics assembly technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61188-5-5 on 2007-11-01.

This standard is to be used in conjunction with EN 61188-5-1.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
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- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61188-5-5:2007 was approved by CENELEC as a European Standard without any modification.

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INTRODUCTION

This part of IEC 61188 covers land pattern for components with J leads on two sides.

The proposed land pattern dimensions in this standard are based upon the fundamental tolerance calculation combined with the given land protrusions and courtyard excesses (see IEC 61188-5-1, Generic requirements). The courtyard includes all issues of the normal manufacturing necessities.

The unaltered land pattern dimensions of this part are generally applicable for the solder paste application plus reflow soldering process. For application of the wave soldering process (though uncommon for SOJ components) the land pattern and courtyard dimensions may have to be modified. An orientation parallel to the wave direction is strongly recommended and suitably dimensioned solder thieves should be added.

This standard offers a threefold land pattern dimensioning (levels 1, 2, 3) on the basis of a threefold set of land protrusions and courtyard excesses: maximum (max.); medium (mdn); and minimum (min.). Nevertheless the user may develop deviating land pattern dimensions based upon the methodology of IEC 61188-5-1, introducing his own special material and assembling process conditions C, F, P and perhaps his own special land protrusions and courtyard excesses dimensions, as required.

If a user has good reasons to use a concept different from that of IEC 61188-5-1 or if the user prefers unusual land protrusions, this standard should be used for checking the resulting solder fillets.

It is the responsibility of the user to verify his used SMD land patterns for achieving an undisturbed mounting process including testing and an ensured reliability for the product stress conditions in use.