Mechanical standardization of semiconductor devices - Part 6-20: General rules forthe preparation of outline drawings of surface mounted semiconductor device packages - Measuring methods for package dimensions of small outline J-lead packages (SOJ)

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60191-6-20:2010 sisaldab Euroopa standardi EN 60191-6-20:2010 ingliskeelset teksti.	This Estonian standard EVS-EN 60191-6-20:2010 consists of the English text of the European standard EN 60191-6-20:2010.
Standard on kinnitatud Eesti Standardikeskuse 30.11.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.10.2010.	Date of Availability of the European standard text 15.10.2010.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 31.080.01

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English version

Mechanical standardization of semiconductor devices - Part 6-20: General rules for the preparation of outline drawings of surface mounted semiconductor device packages - Measuring methods for package dimensions of small outline J-lead packages (SOJ)

(IEC 60191-6-20:2010)

Normalisation mécanique des dispositifs à semiconducteurs -
Part 6-20: Règles générales pour la préparation des dessins d'encombrement des boîtiers pour dispositifs à semiconducteurs pour montage en surface -
Méthodes de mesure pour les dimensions des boîtiers à sortie en J (SOJ) de faible encombrement
(CEI 60191-6-20:2010)

Mechanische Normung von Halbleiterbauelementen -
Teil 6-20: Allgemeine Regeln für die Erstellung von Gehäusezeichnungen von SMD-Halbleitergehäusen -
Messverfahren für Gehäusemaße von kleinen Gehäusen mit J-förmigen Anschlüssen (SOJ)
(IEC 60191-6-20:2010)

This European Standard was approved by CENELEC on 2010-10-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60191-6-20:2010 E

Foreword

The text of document 47D/771/FDIS, future edition 1 of IEC 60191-6-20, prepared by SC 47D, Mechanical standardization for semiconductor devices, of IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60191-6-20 on 2010-10-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2011-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60191-6-20:2010 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60191-4	-	Mechanical standardization of semiconductor devices - Part 4: Coding system and classification into forms of package outlines for semiconductor device packages	EN 60191-4	-
IEC 60191-6	-	Mechanical standardization of semiconductor devices - Part 6: General rules for the preparation of outline drawings of surface mounted semiconductor device packages	EN 60191-6	-

MECHANICAL STANDARDIZATION OF SEMICONDUCTOR DEVICES –

Part 6-20: General rules for the preparation of outline drawings of surface mounted semiconductor device packages – Measuring methods for package dimensions of small outline J-lead packages (SOJ)

1 Scope

This part of IEC 60191 specifies methods to measure package dimensions of small outline J-lead-packages (SOJ), package outline form E in accordance with IEC 60191-4.

2 Normative references

The following referenced documents are indispensable for the application 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 60191-4, *Mechanical standardization of semiconductor devices – Part 4: Coding system and classification into forms of package outlines for semiconductor device packages*

IEC 60191-6, *Mechanical standardization of semiconductor devices – Part 6: General rules for the preparation of outline drawings of surface mounted semiconductor device packages*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60191-6 apply.

4 Measuring methods

4.1 Description of measuring methods

The measuring methods described in this standard are for dimension values guaranteed to users on the basis of the following items.

a) In general, measuring the dimensions shall be made with the semiconductor packages mounted on a printed circuit board as the guarantee is made to user.

b) In general, measurement may be made either by hand or automatically.

c) Even if a measuring method deviates from the original definition of dimensions, it is defined as an alternative measuring method as long as it is equivalent in view of accuracy and can be used easily. See 4.6.3b.

d) The dimensions that cannot be measured unless the package is destroyed may be calculated from other dimensions or replaced by representative values.