

**Packaging of components for automatic handling - Part
3: Packaging of surface mount components on
continuous tapes (IEC 60286-3:2013)**

EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 60286-3:2013 sisaldab Euroopa standardi EN 60286-3:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 60286-3:2013 consists of the English text of the European standard EN 60286-3:2013.
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**Packaging of components for automatic handling -
Part 3: Packaging of surface mount components on continuous tapes
(IEC 60286-3:2013)**

Emballage de composants pour
opérations automatisées -
Partie 3: Emballage des composants pour
montage en surface en bandes continues
(CEI 60286-3:2013)

Gurtung und Magazinierung von
Bauelementen für die automatische
Verarbeitung -
Teil 3: Gurtung von
oberflächenmontierbaren Bauelementen
auf Endlosgurten
(IEC 60286-3:2013)

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 40/2200/FDIS, future edition 5 of IEC 60286-3, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60286-3:2013.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-03-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-06-21

This document supersedes EN 60286-3:2007.

EN 60286-3:2013 includes the following significant technical changes with respect to EN 60286-3:2007:

- a) integration of EN 60286-3-1:2009 as type 1b (Packaging of surface mount components on continuous pressed carrier tapes);
- b) integration of EN 60286-3-2:2009 as type 2b (Packaging of surface mount components on blister carrier tapes 4 mm in width).

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

Endorsement notice

The text of the International Standard IEC 60286-3:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60286-3-1:2009	NOTE	Harmonised as EN 60286-3-1:2009 (not modified).
IEC 60286-3-2:2009	NOTE	Harmonised as EN 60286-3-2:2009 (not modified).
IEC/TR 62258-3	NOTE	Harmonised as CLC/TR 62258-3.
ISO 11469	NOTE	Harmonised as EN ISO 11469.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60191-2	-	Mechanical standardization of semiconductor devices - Part 2: Dimensions	-	-
IEC 61340-5-1	-	Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements	EN 61340-5-1	-
IEC/TR 61340-5-2	-	Electrostatics - Part 5-2: Protection of electronic devices from electrostatic phenomena - User guide	CLC/TR 61340-5-2	-

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INTRODUCTION

Tape packaging meets the requirements of automatic component placement machines and also covers the use of tape packaging for components and singulated dies for test purposes and other operations.

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PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –

Part 3: Packaging of surface mount components on continuous tapes

1 General

1.1 Scope

This part of IEC 60286 is applicable to the tape packaging of electronic components without leads or with lead stumps, intended to be connected to electronic circuits. It includes only those dimensions that are essential for the taping of components intended for the above-mentioned purposes.

This standard also includes requirements related to the packaging of singulated die products including bare die and bumped die (flip chips).

1.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60191-2, *Mechanical standardization of semiconductor devices – Part 2: Dimensions*

IEC 61340-5-1, *Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements*

IEC/TR 61340-5-2, *Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide*

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply. Definitions apply to all tape types, unless specifically mentioned.

2.1 components

unless specifically mentioned otherwise, for all packaging types for bare die products, the term components refers to components as well as singulated die products

2.2 component sizes

all component sizes are identified with their metric size code (size code, followed by a capital M)

Note 1 to entry: To avoid possible confusion with inch-based size codes, an equivalent table is shown in Table 1.