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| STN | Balenie súčiastok na automatizovanú manipuláciu Časť 3: Balenie súčiastok na povrchovú montáž v nepretržitých páskach | STN EN IEC 60286-3 35 8292 |
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Packaging of components for automatic handling - Part 3: Packaging of surface mount components on continuous tapes

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/19

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EN IEC 60286-3

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English Version

**Packaging of components for automatic handling - Part 3:
Packaging of surface mount components on continuous tapes
(IEC 60286-3:2019)**

Emballage de composants pour opérations automatisées -
Partie 3: Emballage des composants pour montage en
surface en bandes continues
(IEC 60286-3:2019)

Gurtung und Magazinierung von Bauelementen für
automatische Verarbeitung - Teil 3: Gurtung von
oberflächenmontierbaren Bauelementen auf Endlosgurten
(IEC 60286-3:2019)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60286-3:2019 (E)**European foreword**

The text of document 40/2643/FDIS, future edition 6 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 IEC 60286-3:2019.

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) 2019-11-20
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IEC 61340-5-1 NOTE Harmonized as EN 61340-5-1
IEC/TR 61340-5-2 NOTE Harmonized as CLC/TR 61340-5-2
IEC/TR 62258-3 NOTE Harmonized as CLC/TR 62258-3
ISO 11469 NOTE Harmonized as EN ISO 11469

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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| <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 | of- 2: | - |



IEC 60286-3

Edition 6.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Packaging of components for automatic handling –
Part 3: Packaging of surface mount components on continuous tapes**

**Emballage de composants pour opérations automatisées –
Partie 3: Emballage des composants pour montage en surface en bandes
continues**





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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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IEC 60286-3

Edition 6.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Packaging of components for automatic handling –
Part 3: Packaging of surface mount components on continuous tapes**

**Emballage de composants pour opérations automatisées –
Partie 3: Emballage des composants pour montage en surface en bandes
continues**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –

Part 3: Packaging of surface mount components on continuous tapes

FOREWORD

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International Standard IEC 60286-3 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This sixth edition cancels and replaces the fifth edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) addition of a table of the classification to symbols concerning tape, reel and common symbols;
- b) additions of a figure of example of polarity and orientation and a figure of example of dot seal;
- c) revision of requirements for camber;

d) addition of a definition of design value with regard to tilt.

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

| FDIS | Report on voting |
|--------------|------------------|
| 40/2643/FDIS | 40/2649/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 60286 series, published under the general title *Packaging of components for automatic handling*, 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.

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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.

PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –

Part 3: Packaging of surface mount components on continuous tapes

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

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

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