Packaging of components for automatic handling - Part 2: Packaging of components with unidirectional leads on continuous tapes



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ICS 31.020, 31.240

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes EN 60286-2:2009

#### **English Version**

## Packaging of components for automatic handling - Part 2: Packaging of components with unidirectional leads on continuous tapes (IEC 60286-2:2015)

Emballage de composants pour opérations automatisées -Partie 2: Emballage des composants à sorties unilatérales en bandes continues (IEC 60286-2:2015) Gurtung und Magazinierung von Bauelementen für automatische Verarbeitung - Teil 2: Gurtung von Bauelementen mit einseitig herausgeführten Anschlussdrähten (IEC 60286-2:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

#### **Foreword**

The text of document 40/2343/FDIS, future edition 4 of IEC 60286-2, 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 60286-2:2015.

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
- latest date by which the national standards conflicting with (dow) 2018-05-27 the document have to be withdrawn

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The text of the International Standard IEC 60286-2:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO 11469:2000 NOTE Harmonized as EN ISO 11469:2000.

# 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication IEC 60097 IEC 60301	<u>Year</u> 1991 -	Title Grid systems for printed circuits Preferred diameters of wire terminations capacitors and resistors	<u>EN/HD</u> EN 60097 ofEN 60301	<u>Year</u> 1993 -
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#### PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING -

# Part 2: Tape packaging of components with unidirectional leads on continuous tapes

#### 1 Scope

This part of IEC 60286 applies to the tape packaging of components with two or more unidirectional leads for use in electronic equipment. In general, the tape is applied to the component leads.

It covers requirements for taping techniques used with equipment for automatic handling, preforming of leads, insertion and other operations and includes only those dimensions which are essential to the taping of components intended for the above-mentioned purposes.

### 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 60097:1991, Grid systems for printed circuits

IEC 60301, Preferred diameters of wire terminations of capacitors and resistors

#### 3 Terms, definitions and symbols

For the purpose of this document, the following terms, definitions and symbols apply.

#### 3.1 Terms and definitions

#### 3.1.1

#### package

product made of any material of any nature to be used in containment, protection, structured alignment for automatic assembly, handling and delivery

#### 3.1.2

#### short terminal without tape

terminal which is not held between carrier tape and cover tape

Note 1 to entry: See Figure 1.