

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Packaging of components for automatic handling –  
Part 2: Tape packaging of components with unidirectional leads on continuous  
tapes**

**Emballage de composants pour opérations automatisées –  
Partie 2: Emballage des composants à sorties unilatérales en bandes continues**



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COMMISSION

COMMISSION  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –****Part 2: Tape packaging of components with  
unidirectional leads on continuous tapes**

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IEC 60286-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2015. This edition constitutes a technical revision.

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

- a) complete revision of structure;
- b) consolidation of essential parameters and requirements in Clause 4.

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

Draft	Report on voting
40/2974/FDIS	40/2996/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

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.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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- amended.

# 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. It provides dimensions and tolerances necessary to tape components with unidirectional leads. In general, the tape is applied to the component leads.

It covers requirements for taping techniques used with equipment for automatic handling, pre-forming 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

There are no normative references in this document.

### 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

#### 3.1 packaging

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

#### 3.2 unguided lead

lead which is not held between carrier tape and hold-down tape

Note 1 to entry: See Figure 5.

#### 3.3 crimp cinch

purposely formed angular deformation, starting at the reference plane, in such a way that the component bottom side does not touch the top surface of the printed circuit board after insertion and therefore acts as a "stand-off"

Note 1 to entry: The formed crimp is available in different forms, see Figure 2.