Packing

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Never stop thinking
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1 Introduction

Infineon packing methods and materials are designed based on the following considerations:

- Protection against mechanical damage caused by handling and arising during shipment to the customer.
- Protection against environmental influences such as moisture.
- Protection against electrical damage caused by charging or discharging (ESD = Electro-Static Discharge).
- Sensible handling on the part of the customer (such as, for example, processing using pick-and-place machines).

2 Sorts of Packing

2.1 Tape & Reel

- DIN IEC 60 286-3

The components are placed on a plastic tape (carrier tape) made of polystyrene or polycarbonate, with correspondingly shaped recesses in its surface, which is then sealed with a cover tape (transparent foil). The tape is wound on to a reel, and supplied in a cardboard box (resembling a pizza box). There are now also larger boxes, including the so-called "Big-Box", which can accommodate up to 10 reels.

![Diagram of Tape & Reel](CTPG5610)

**Figure 1** Tape & Reel

Ø Reel 180 mm and 330 mm
2.2 Tube

- DIN IEC 60 286-4

In this case, the components are inserted into a PVC tube of appropriate cross sectional shape and standard length (528 mm). It is open on both sides and after filling is sealed using stoppers or pins. A number of tubes in one box form a packing unit.
2.3 Tray

- DIN IEC 60 286-5

Here, the components are placed in rows in special compartmentalized plastic trays. One or more such trays laid one on top of the other here make up a packing unit.

Figure 3  Tray’s
2.4 Supplementary Dry-Pack

- JEDEC-STD-033B
Prior to packing, the components are heated to 125° C, for example, over a period of 24 hours, and then vacuum-sealed in a bag made of composite aluminum-plastic material. A desiccant is included in the packaging to remove residual moisture and soak up moisture penetrating the packaging during storage. An accompanying moisture indicator card shows the relative humidity level as a means of control.

2.5 Boxes

For each type of packing, there is an appropriate, correctly proportioned box or outer pack. Each outer pack also receives a product label, on which all the important data is printed, in the form of a barcode and plain text (BPL = Barcode Product Label). After undergoing quality control, the boxes are sealed with an Infineon packing label.

![Figure 4 Box](image)

Please consult your nearest Infineon semiconductor solder offices (see list of addresses) if you have any queries regarding the packaging units or multiple use.

Subject to change in the light of the new Packaging Act.
3  Tape and Reel

3.1  Tape

- DIN IEC 60 286-3

Figure 5  Packing for Tape & Reel

*) Carrier tape width + 14 mm

1) All dimensions in mm
Figure 6  Φ Reel 180 mm and 330 mm
Carrier tape width: 8, 12, 16 [mm]

Additional customer label (optional)
Barcode label (readable in this position)
Removable cover tape
Direction of unreeling

Figure 7  Φ Reel 330 mm
Carrier tape width: 16, 24, 32, 44 [mm]
Figure 8  ø Reel 180 mm
Embosed Carrier tape width: 8 [mm]

Figure 9  Fixing on the Tape

1) All dimensions in mm
Figure 10  Direction of Unreeiling

There shall be a leader of 400 mm minimum of cover tape, which includes at least 100 mm of carrier tape with empty compartments. All the leader may consist of the carrier tape with empty compartments, sealed by cover tape.

Figure 11  Labels and Boxes

1) All dimensions in mm
3.2 Ammopack

- Placed in Zigzag (DIN IEC 60 286-2)

Figure 12  Up to 8.000 Components, Ammopack\(^1\)

Figure 13  Up to 2.000 Components, Ammopack\(^1\)

\(^1\) All dimensions in mm
Figure 14  Supplementary Code for Ammopack
3.3 Radial Tape

Figure 15  Packing for Radial Tape

1) All dimensions in mm
Figure 16  Supplementary Code for Radial Tape
4 Tube

- DIN IEC 60 286-4
- Standard Length: 528.2 mm; coated (unless stated to the contrary)

Figure 17  Packing for Tube\(^1\)

\(^1\) All dimensions in mm
5 Trays

5.1 Bakable Tray

- Temperature max. 150°C (DIN IEC 60 286-5)

Figure 18 Bakable Tray

1) All dimensions in mm
Figure 19  Type of Boxes for Bakable Tray

1) All dimensions in mm
5.2 **Blister Tray**

![Blister Tray Diagram](image)

**Figure 20  Blister Tray**

1) All dimensions in mm
Figure 21  Packing for Blister Tray

1) All dimensions in mm
6 Bulk Material

Figure 22 Bulk Material\textsuperscript{1)}

\textsuperscript{1)} All dimensions in mm
7 Supplementary Dry-Pack

- JEDEC-STD-033B

Figure 23 Example Dry-Pack e.g. for Tubes