

Tape and Reel Packing - Diodes

General

SCOPE

This chapter covers packing and packing quantity details for surface-mount and leaded diodes in the following packages:

Table 1 Survey of packages

PACKAGE	
SURFACE-MOUNT	THROUGH-HOLE
SOD110	SOD68 (DO-34)
SOD323	
SOD523	

SURFACE-MOUNT DEVICES

Tape and reel packing for surface-mount devices meets the feed requirements for automatic pick and place equipment (packing conforms to IEC publication 286-3). Tape is an ideal shipping container making handling easy and providing secure blister cavities in which the devices are sealed with peel-off cover tape.

Tape specification

Tape dimensions are specified in Tables 2, 3 and 4 and in Figs.1 through 3. For diodes with only two terminations, the cathode side of the device is adjacent to the sprocket holes in the tape.

Table 2 Variable tape dimensions

PACKAGE	SYMBOL					
	W (mm)	F (mm)	P (mm)	K (mm)	B ₁ (mm)	D ₁ (mm)
SOD110	8.0	3.5	4.0	2.5	4.2	1.0
SOD323	8.0	3.5	4.0	1.5	4.2	1.0
SOD523	8.0	3.5	4.0	1.5	4.2	1.0
Tolerance	±0.2	0.05	±0.1	max.	max.	min.

Table 3 Fixed tape dimensions

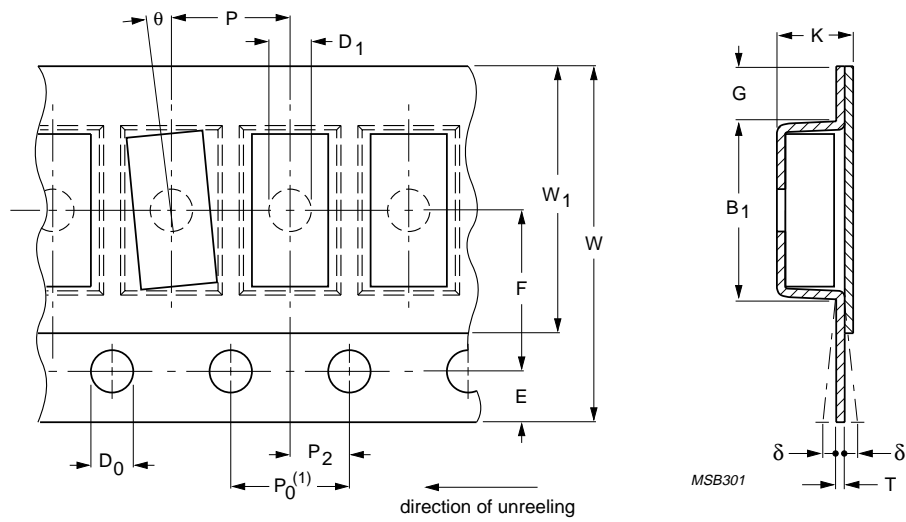
PACKAGE	SYMBOL							
	E (mm)	D ₀ (mm)	P ₀ (mm)	P ₂ (mm)	G (mm)	T (mm)	δ (mm)	θ (deg)
Detailed in Table 2	1.75	1.5	4.0	2.0	0.75	0.4	0.3	15
Tolerance	±0.1	-0/+0.1	±0.1	±0.05	min.	max.	max.	max.

Table 4 See Fig.3

PACKAGE	SYMBOL				
	AO	BO	KO	P1	W
SOD523	0.9	1.4	1.0	4.0	8.0

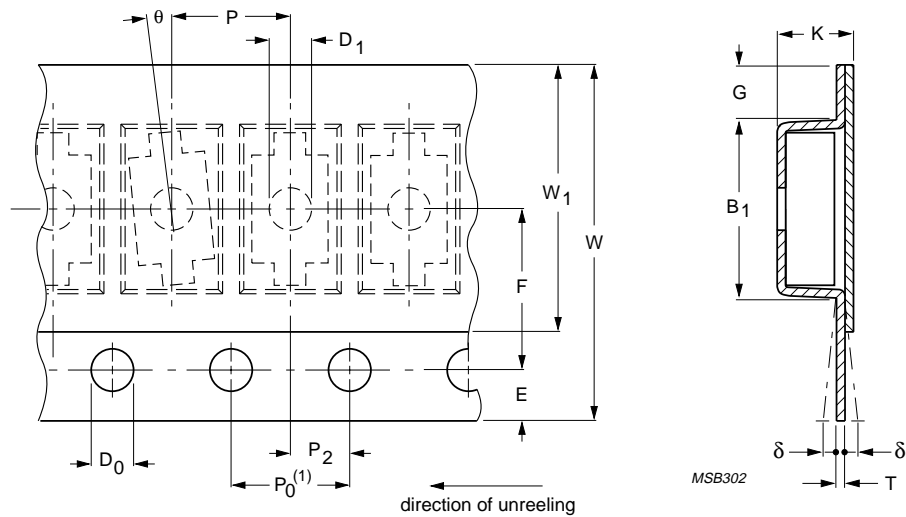
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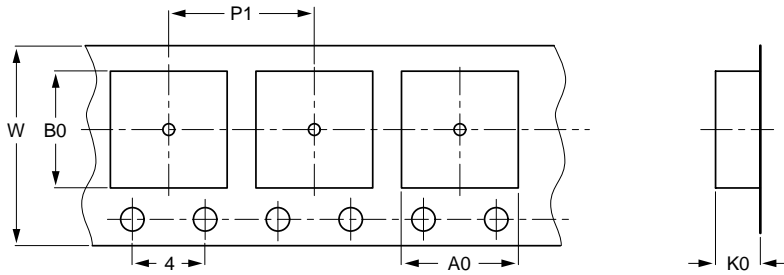
For dimensions see Tables 2 and 3.
 (1) Tolerance over any 10 pitches is 0.2 mm.

Fig.1 Specification for 8 mm tape (SOD110).



For dimensions see Tables 2 and 3.
 (1) Tolerance over any 10 pitches is 0.2 mm.

Fig.2 Specification for 8 mm tape (SOD323).



MSC080

For dimensions see Table 4.

Fig.3 Specification for 8 mm tape (SOD523).

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Reel specification

Reel dimensions are specified in Fig.4 and Table 5 for 8 mm tape.

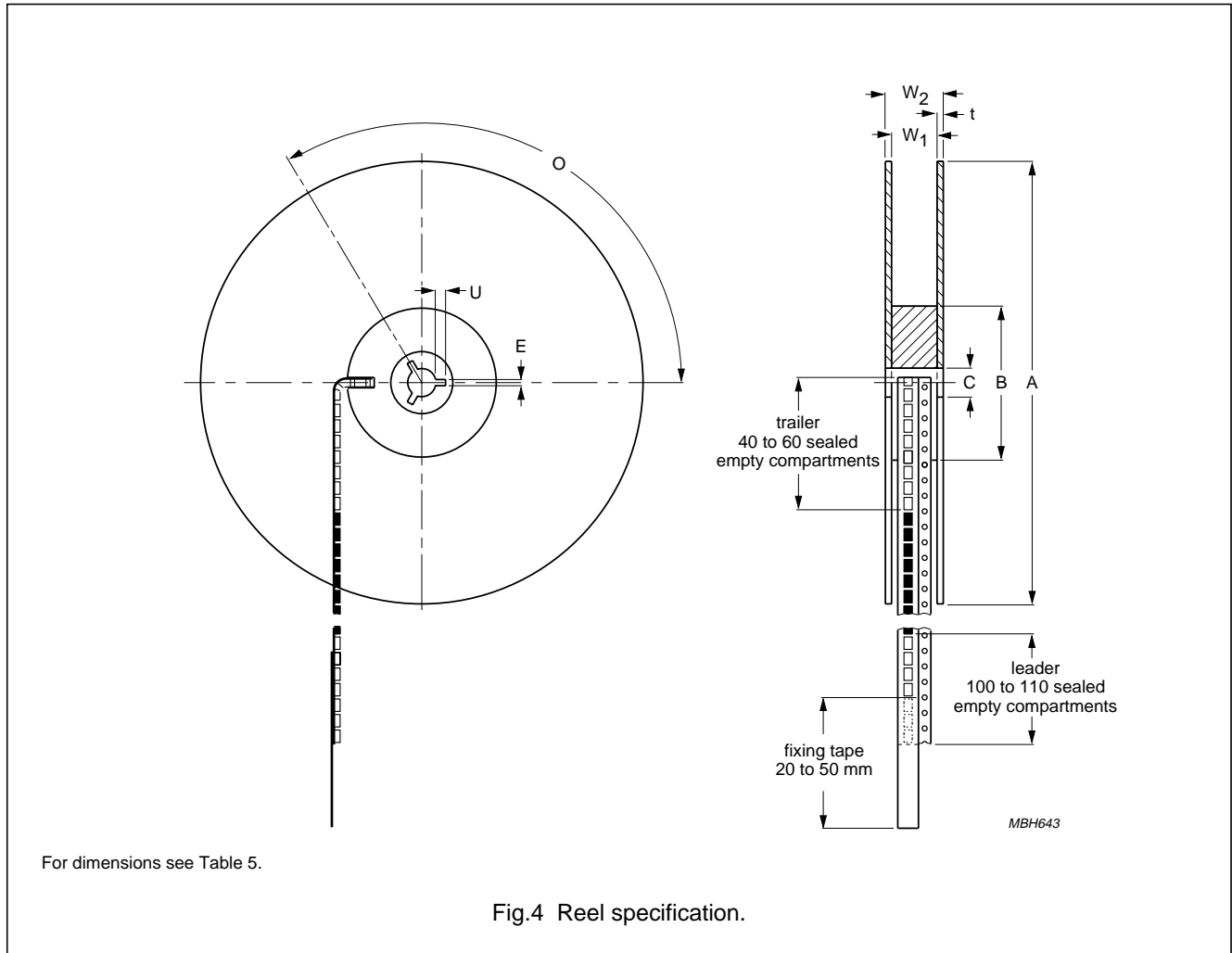


Table 5 Reel dimensions

TAPE WIDTH	SYMBOL							
	A (mm)	B (mm)	C (mm)	W ₁ (mm)	W ₂ (mm)	E (mm)	U (mm)	O (deg)
8 mm	180/286 or 180/330	62	12.75	8.4	14.4	1.5	3.6	120
Tolerance	±0.5	±1.5	-0/+0.15	-0/+1.5	max.	min.	min.	-

Tape and Reel Packing - Diodes

General

Packing quantities

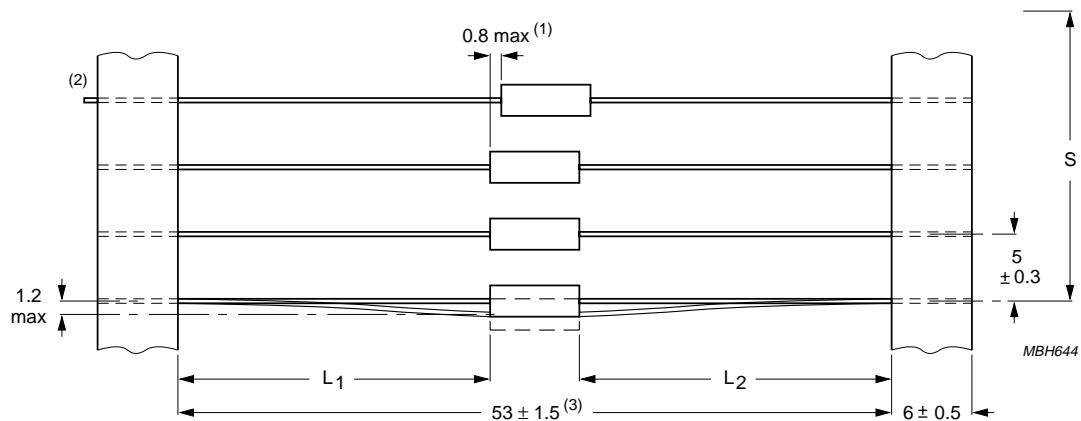
Table 6 shows the packing quantities for a single box for each package style.

Table 6 Packing quantities per package with relevant ordering code

PACKAGE	PACKING QUANTITY	ORDERING CODE ENDING	KIND OF PACKING	REEL DIAMETER (mm/inch)
SOD110	3000	115	8 mm tape and reel	180/7
	10000	135	8 mm tape and reel	330/13
SOD323	3000	115	8 mm tape and reel	180/7
	10000	135	8 mm tape and reel	286/11 ¹ / ₄
SOD523	3000	115	8 mm tape and reel	180/7
	10000	135	8 mm tape and reel	286/11 ¹ / ₄

LEADED DEVICES**Axial diodes**

Axial diodes are available on tape according to IEC 286-1. They are most suitable for use in automatic insertion machines, cutting and forming tools, and are supplied on reels or in boxes (ammopacks).

TAPE SPECIFICATION

Dimensions in mm.

The red tape indicates the cathode terminal of the diode.

The cumulative space (S) measured over ten spacings is 50 ± 2 mm; for 26 mm tape, this is 100 ± 2 mm for 20 spacings.

The diodes are centered so that $L_1 - L_2 \leq 1.2$ mm.

A black marker is printed on the white tape of the bandolier to mark every 50 diodes.

The axial tape specification is compatible with automatic insertion equipment from Universal, U.S.M. (Dynapert) and M.E.I. (Panaset).

Notes

- (1) Displacement between any two diodes: maximum 0.4 mm for SOD68 (DO-34).
- (2) No protruding leads.
- (3) For 26 mm tape, this dimension is $26 + 1.5/-0$ mm.

Fig.5 Tape specification for axial diodes.

REEL SPECIFICATION

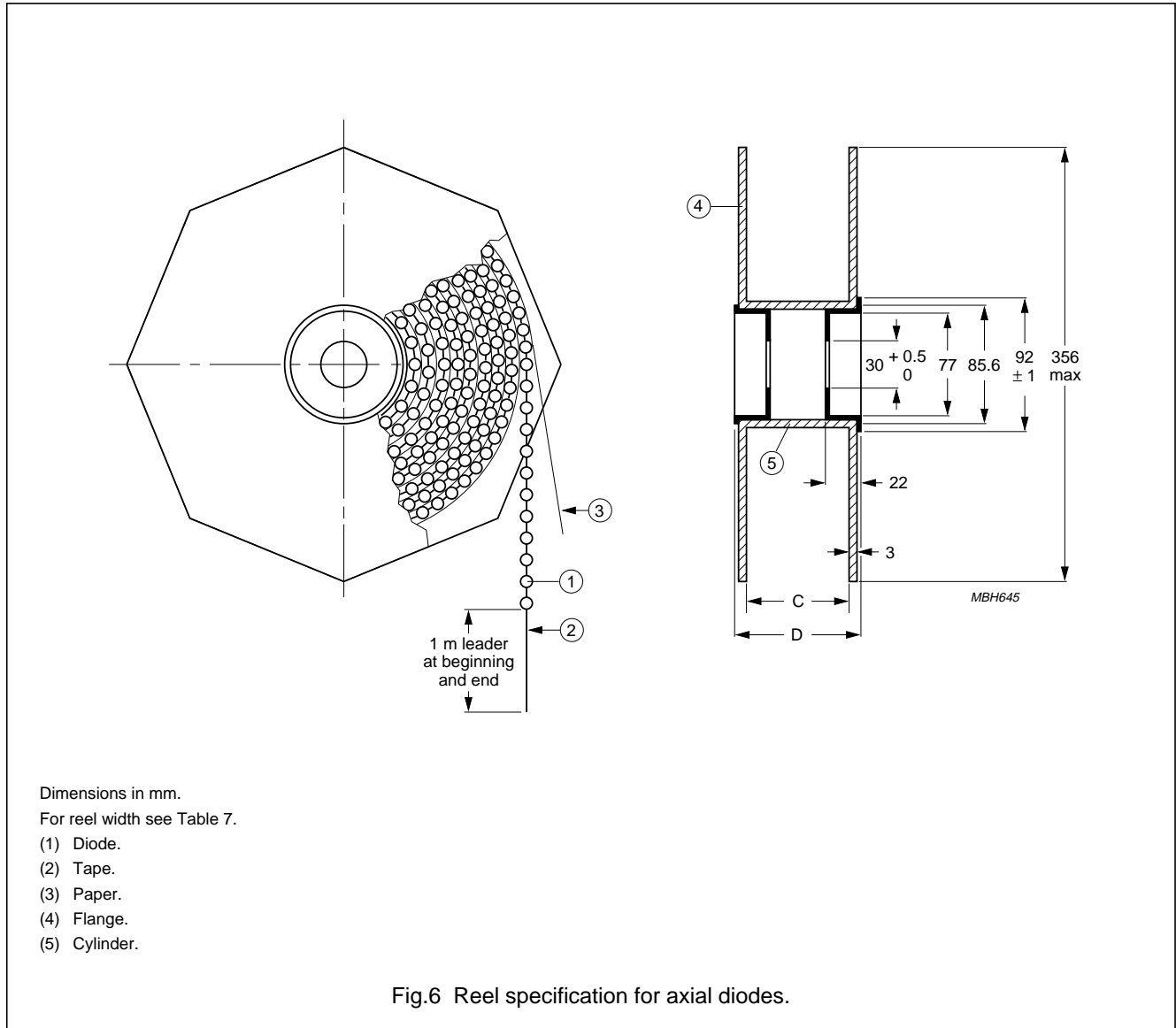
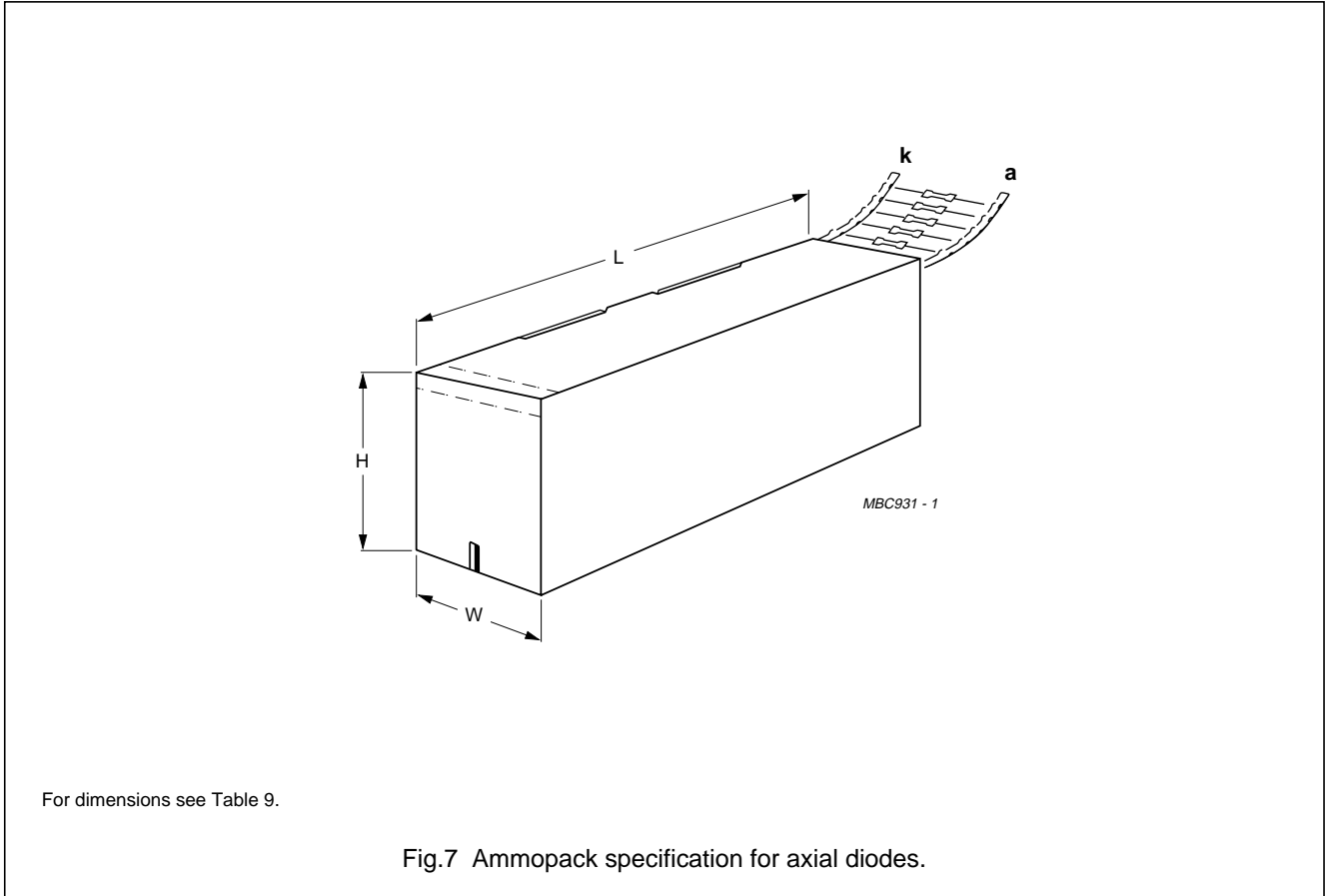


Table 7 Reel width

TAPE WIDTH (mm)	SYMBOL	
	C (mm)	D (mm)
26	40	50
53	70	80
58	75	85

AMMOPACK SPECIFICATION



Packing quantities

Table 8 Packing quantities per package with relevant ordering code

PACKAGE	PACKING QUANTITY	ORDERING CODE ENDING	KIND OF PACKING	REEL DIAM. or BOX SIZE (mm/inch)
SOD68 (DO-34)	10000	113	53 mm tape and reel	356/14
	10000	133	53 mm tape, ammpack	263 × 73 × 102

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