

# **NTC Thermistors**

## **Taping and packing**

Date: January 2018

© EPCOS AG 2018. Reproduction, publication and dissemination of this publication, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

EPCOS AG is a TDK Group Company.

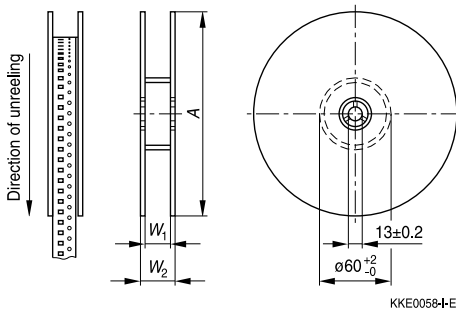
## Taping and packing

### 1 Taping of SMD NTC thermistors

Tape and reel packing according to IEC 60286-3.

Tape material: Cardboard or blister, tape width  $8 \pm 0.30$  mm

### 2 Reel packing

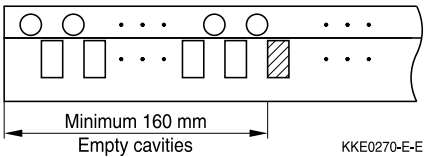


#### Dimensions in mm

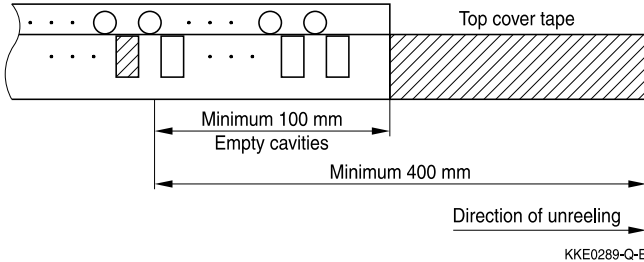
	8-mm tape	
	180-mm reel	330-mm reel
A	180 $+0/-3$	330 $+0/-2.0$
$W_1$	8.4 $+1.5/-0$	8.4 $+1.5/-0$
$W_2$	14.4 max.	14.4 max.

#### Leader, trailer

Trailer (tape end)

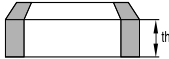
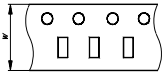

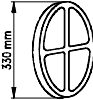


Leader



## Taping and packing

### Packing units for discrete chip

					
Case size	Chip thickness	Cardboard tape	Blister tape	∅ 180-mm reel	∅ 330-mm reel
inch/mm	th	W	W	pcs.	pcs.
0402/1005	0.5 mm	8 mm	–	10000	50000
0603/1608	0.8 mm	8 mm	8 mm	4000	16000
0805/2012	0.8 mm	–	8 mm	2000/ 4000	16000
	1.2 mm	–	8 mm	3000	12000
1206/3216	0.8 mm	–	8 mm	2000	12000
	1.2 mm	–	8 mm	4000	12000

### 3 Packing codes

The last two digits of the complete ordering code state the packing mode:

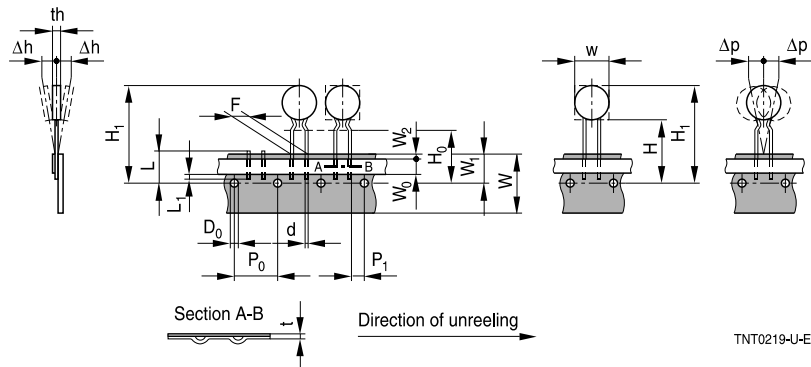
Last two digits			
60	SMD	Cardboard tape	180-mm reel packing
62	SMD	Blister tape	180-mm reel packing
70	SMD	Cardboard tape	330-mm reel packing
72	SMD	Blister tape	330-mm reel packing

## Taping and packing

### 4 Taping of radial leaded NTC thermistors

#### Dimensions and tolerances

Lead spacing  $F = 2.5 \text{ mm}$  and  $5.0 \text{ mm}$  (taping to IEC 60286-2)



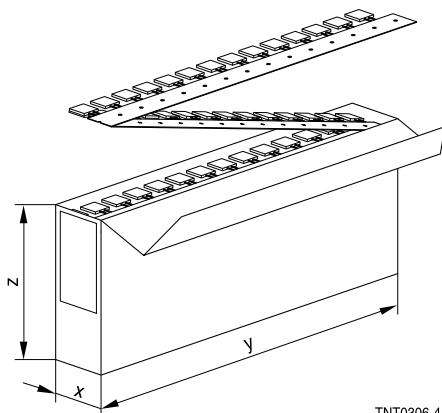
#### Dimensions (mm)

	Lead spacing 2.5 mm	Lead spacing 5 mm	Tolerance of lead spacing 2.5/5 mm	Remarks
w	11.0	11.5	max.	
th	5.0	6.0	max.	
d	0.5/0.6	0.5/0.6	±0.05	
P <sub>0</sub>	12.7	12.7	±0.3	±1 mm / 20 sprocket holes
P <sub>1</sub>	5.1	3.85	±0.7	
F	2.5	5.0	+0.6/-0.1	
Δh	0	0	±2.0	measured at top of component body
Δp	0	0	±1.3	
W	18.0	18.0	±0.5	
W <sub>0</sub>	5.5	5.5	min.	peel-off force ≥5 N
W <sub>1</sub>	9.0	9.0	+0.75/-0.5	
W <sub>2</sub>	3.0	3.0	max.	
H	18.0	18.0	+2.0/-0	
H <sub>0</sub>	16.0	16.0	±0.5	
H <sub>1</sub>	32.2	32.2	max.	
D <sub>0</sub>	4.0	4.0	±0.2	
t	0.9	0.9	max.	without wires
L	11.0	11.0	max.	
L <sub>1</sub>	4.0	4.0	max.	

## Taping and packing

### Types of packing

#### Ammo packing

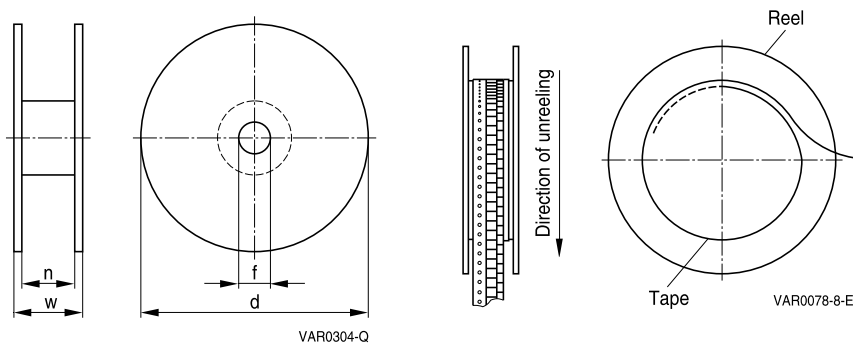


TNT0306-4

Ammo type	x	y	z
I	80	240	210

**Packing unit:** 1000 - 2000 pcs./reel

#### Reel packing



VAR0304-Q

VAR0078-8-E

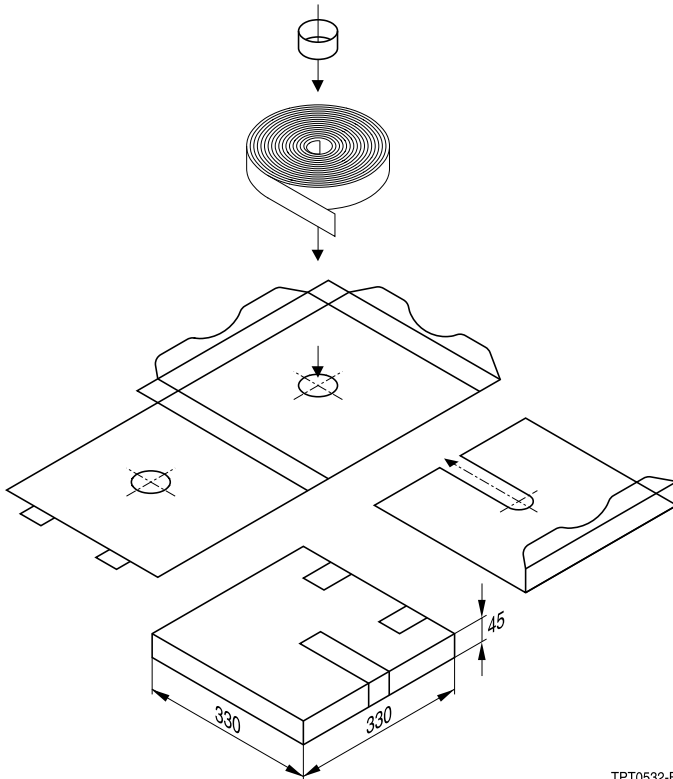
**Packing unit:** 1000 - 2000 pcs./reel

#### Reel dimensions (in mm)

Reel type	d	f	n	w
I	360 max.	31 ±1	approx. 45	54 max.

## Taping and packing

### Cassette packing



TPT0532-B

**Packing unit:** 1000 - 2000 pcs./cassette

### Bulk packing

The components are packed in cardboard boxes, the size of which depends on the order quantity.

## Taping and packing

### 5 Packing codes

The last two digits of the complete ordering code state the packing mode:

Last two digits			
00, 01, 02, 03, 04, 05, 06, 07, 08	–	Bulk	–
40, 41	–	Bulk	–
45	–	Bulk	–
50	Radial leads, kinked	Cardboard tape	Cassette packing
51	Radial leads, kinked	Cardboard tape	360-mm reel packing
52	Radial leads, straight	Cardboard tape	Cassette packing
53	Radial leads, straight	Cardboard tape	360-mm reel packing
54	Radial leads, kinked	Cardboard tape	AMMO packing
55	Radial leads, straight	Cardboard tape	AMMO packing

(If no packing code is indicated, this corresponds to 40)

Example 1:	B57164K0102J000	Bulk
	B57164K0102J052	Cardboard tape, cassette packing
Example 2:	B57881S0103F002	Bulk
	B57881S0103F251	Cardboard tape, reel packing