

## NTC-Thickfilm-Temperature Sensors, radial leaded

Type: TNL

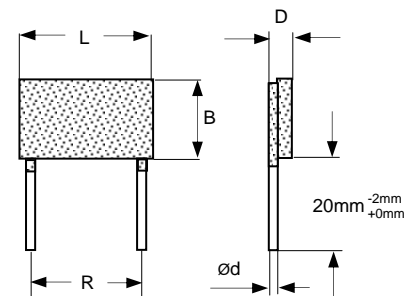
Sizes: 1206, 1210

### Features:

- NTC-Resistors in Thickfilm
- Variable lead spacing
- Non-magnetic
- Untrimmed for higher Working Voltage
- Versions with heater available
- Climatic protection by lacquer coating

### Dimensions:

Size	L	B	D	R	d
1206	3,2	1,5	0,8	2,0	0,40 <sup>±0,05</sup>
1210	3,2	2,5	0,9	2,0	0,40 <sup>±0,05</sup>



L = Length, B = Width, D = Thickness (Tolerance of dimensions:  $\pm 0.5$  mm)  
d = Standard wire diameter (in mm), other diameters possible  
R = Standard lead spacing (other spacing possible by bending)

### Packaging:

Bulk in foam layers  
Minimum quantity 100 pieces per value

### Bestellangaben:

Type – value – tolerance – TCR – TCR-tolerance  
Example: TNL 1206, 100k  $\pm 10\%$  TK -3500  $\pm 400$  ppm/K

Untrimmed parts are indicated by the extension “NA” in the order code:  
Type – value – tolerance – NA – TCR – TCR-tolerance – packaging  
Example: TNL 1206, 100k  $\pm 10\%$  NA TCR -3500  $\pm 400$  ppm/K

Ausgabe 09-2007 Draft

## NTC-Dickschicht-Temperatursensoren, radial bedrahtet

Typenbezeichnung: TNL

Baugrößen: 1206, 1210

### Technische Daten - baugrößenabhängig:

Size	1206	1210
Power rating $P_{70}$ (mW) ( $P_{155} = 0$ mW)	250	350
Working voltage $U_{-}$ , $U_{\text{eff}}$ (V) trimmed untrimmed	200 600	300 1000

Value Ranges		
Resistance	50 R – 80 M	25 R – 150 M
Tolerance	5/10/20%	5/10/20%
TCR (ppm/K)	-1000 ... -6000	-1000 ... -6000

Standard-TCR-Tolerance:  $\pm 400$  ppm/K; closer tolerances of value and TCR on request

### Technical data – general:

Temperature range	- 55°C ... + 125°C
Climatic category acc. to DIN EN 60068-1	55/125/56
Humidity- / contact protection	Lacquer coating

Long term stability	
Storage 125°C/1000h	<1%
Load $P_{70}$ /70°C/1000h	<1%
Damp heat (56d/40°C/96%)	<1%

Data not specified according CECC 40401-802

All data are preliminary.

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