

PTC-Thickfilm Temperature Sensors

Type: TPS

Sizes: 0402, 0603, 0805, 1206

Features:

- PTC-Chip Resistors in Thickfilm
- Contact areas tinned
- Resistance element glass-passivated
- Versions for conductive glueing, with heating functions and for active trimming available

Dimensions:

Size	L	B	D	C
0402	1.04 ^{±0.05}	0.50 ^{±0.05}	0.3 ^{±0.05}	0.1 ^{+0.1/-0.05}
0603	1.5 ^{+0.15/-0.05}	0.80 ^{+0.15/-0.05}	0.4 ^{+0.1/-0.05}	0.2 ^{+0.2/-0.1}
0805	2.0 ^{+0.15/-0.05}	1.2 ^{+0.2/-0.05}	0.4 ^{+0.15/-0.1}	0.3 ^{+0.2/-0.1}
1206	3.2 ^{+0.15/-0.05}	1.5 ^{+0.2/-0.05}	0.6 ^{+0.15/-0.1}	0.3 ^{+0.2/-0.1}

L = Length, B = Width, D = Thickness, C = Width wrap-around (in mm)

Packaging:

Bulk or Tape/Reel acc. to DIN IEC 286-3/E/A481-1-A
(tape width 8 mm, reel diameter 180 mm/330 mm)

Minimum quantity bulk: 100 pieces per value

Minimum quantity tape: 1000 pieces per value

Ordering data

Type – Value – Tolerance – TCR – Tolerance of TCR – Packaging

Example: TPS 0805 1k ± 5% TCR + 2000 ± 400 taped

SRT Resistor Technology

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Technical data – depending on size:

Size	0402	0603	0805	1206
Power rating (P_{70}/mW)	25	50	65	125
Working voltage U_{-} , U_{eff} (V) trimmed untrimmed	30 90	75 220	100 300	200 600

Range/TCR/ Tolerance (25°C)				
1 R – 9R1	+3600 10/20 %	+3600 10/10 %	+3600 5/10/20 %	+3600 5/10/20 %
10 R – 95R3	+3000/+3500 5/10/20 %	+3000/+3500 5/10/20 %	+3000/+3500 2/5/10 %	+3000/+3500 2/5/10 %
100 R – 953R	+2000/+2800 5/10/20 %	+2000/+2800 5/10/20 %	+2000/+2800 2/5/10 %	+2000/+2800 2/5/10 %
1K – 2K05	+1600/+2000/+2800 5/10/20 %	+1600/+2000/+2800 5/10/20 %	+1600/+2000/+2800 2/5/10 %	+1600/+2000/+2800 2/5/10 %
2K15 – 5K11	–	–	–	+1600/+2800 2/5/10 %

Standard-TCR/Tolerance: ± 400 ppm/K
Closer tolerance of value an TCR on request

General technical data:

Temperature range	$-55^{\circ}\text{C} \dots +155^{\circ}\text{C}$
Climatic category to DIN IEC 68	55/155/56
Solderability ¹⁾	235°C 2s
Max. soldering temperature ²⁾	260°C 10s

Long term stability:	
Storage 125°C/1000 h	< 1 %
Storage 155°C/1000 h	< 2 %
Load $P_{70}/70^{\circ}\text{C}/1000$ h	< 2 %
Damp heat (56 d/40°C/96 %)	< 1 %

1) DIN IEC 68 T2-20, Ta Meth. 1

2) DIN IEC 68 T2-20, Tb Meth. 1A

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