

PTC-Thickfilm Temperature Sensors
Type: TPS
Sizes: 0402, 0603, 0805, 1206

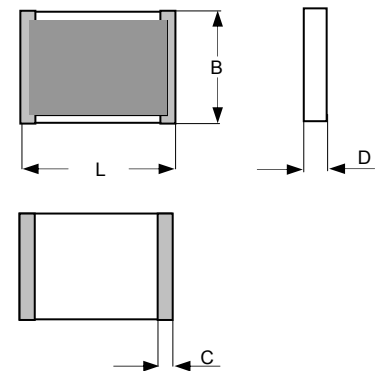


Features:

- PTC-Chip Resistors in Thickfilm
- Contact areas tinned or PtAg
- Versions as heater and for active trimming available

Dimensions:

Size	L	B	D	C
0402	1.04 ± 0.05	0.50 ± 0.05	0.30 ± 0.05	0.1 $+0.1/-0.05$
0603	1.50 $+0.15/-0.05$	0.80 $+0.15/-0.05$	0.40 $+0.15/-0.05$	0.2 $+0.2/-0.1$
0805	2.00 $+0.15/-0.05$	1.25 $+0.15/-0.05$	0.40 $+0.15/-0.05$	0.3 $+0.2/-0.1$
1206	3.20 $+0.15/-0.05$	1.50 $+0.2/-0.05$	0.40 $+0.15/-0.05$	0.3 $+0.2/-0.1$



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

Packaging:

Bulk in plastic bags – minimum quantity 100 pieces per value
 Blister tape acc. to IEC 60286-3 – minimum 1000 pieces per value
 Reel diameter 180 mm or 330 mm

Ordering Data:

Type – value – tolerance – TCR – contact material – packaging
 Example: TPS 0805 1 k $\pm 5\%$ TC + 2000 ± 400 PtAg Tape 180 mm

If no requirements for TCR, contact material and taping are given, the higher TCR-value, contact material PtAg will be supplied and packaging is bulk

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Technical data – depending on size:

Size	0402	0603	0805	1206
Power rating P ₇₀ (mW) (P ₁₅₅ = 0 mW)	25	50	65	125
Working voltage U ₋ , U _{eff} (V) trimmed untrimmed	30 90	75 220	100 300	200 600

Ranges / Tolerances / TCR / VCR				
1R – 9R1	+3600 10/20%	+3600 10/20%	+3600 5/10/20%	+3600 5/10/20%
10R – 95R3	+3000/ +3500 5/10/20%	+3000/ +3500 5/10/20%	+3000/ +3500 2/5/10%	+ 3000/ +3500 2/5/10%
100R – 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 and TCR on request

Technical data – general:

Temperature range	- 55°C ... + 155°C
Climatic category acc. to IEC 60068	55/155/56
Solderability acc IEC 60068 T2-20, Ta Meth.1 ¹⁾	235°C 2s/5s
Max. soldering temperature acc. IEC 60068 T2-20 Tb M. 1A	260°C 10s

Long term stability	1R – 5K11
Storage 125°C/1000h	<1%
Storage 155°C/1000h	<2%
Load P ₇₀ /70°C/1000h	<2%
Damp heat (56d/40°C/96%)	<1%

¹⁾ PtAg: Up to 6 months after shipment resp. at storage in Nitrogen
 Data not specified according CECC 40401-802

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