

Platinum-Chip-Temperature sensors acc. DIN EN 60 751

Type: CPT

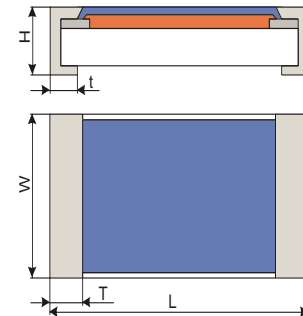
Sizes: 0805, 1206

Characteristics:

- Temperature sensors in thin film technology
- Wide area of temperature measurement from -50 to +150°C
- Standardized nominal values and tolerances
- Tolerance classes F0,1, F0,15, F0,3
- High measurement accuracy and good long time stability
- Good linear characteristic curves
- Varnish passivation
- Galvanic wrap-around contact with diffusion barrier
- Suitable for automatic large-scale production
- Tape packaging acc. DIN IEC 286-3
- RoHS-conform

Dimensions (in mm):

Size	L Length	W Width	H Depth	T/t Contact
0805	2,00±0,2	1,30±0,2	0,50±0,2	0,40±0,2
1206	3,10±0,2	1,50±0,2	0,80±0,2	0,63±0,2



Packaging units:

Reel Ø	Card tape acc. EN 60286-3
180 mm	5 T pcs.
330 mm	10 T pcs. 20 T pcs.
Samples on request	

Ordering information:

CPT	0805	1k	B	K	P	5 (optional)
Type	Size	R-Value	Class	Marking	Packaging	pcs. / Reel (T pcs.)
CPT	0805 1206	100R 500R 1k	Temperature range class 0,1 / 0,15 / 0,3	K- only with	P- Card tape S- Bulk	Depends on size and packaging unit

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Technical data:

Nominal R-Values:	100 Ohm, 500 Ohm, 1000 Ohm at 0°C				
Temperature coefficient:	$\alpha = 3,850 \times 10^{-3}/^{\circ}\text{C}$ (between 0 and 100°C)				
Temperature range:	-50 ... +150°C				
Tolerance:	Temperature range Class 0,1: 0 to +150°C Temperature range Class 0,15: -30 to +150°C Temperature range Class 0,3: -50 to +150°C				
Measurement current:	Pt 100	1,0mA recommended			
	Pt 500	0,7mA recommended			
	Pt 1000	0,1mA recommended			
Maximum current:	Pt 100	7,0mA			
	Pt 500	3,0mA			
	Pt 1000	1,0mA			
Long time stability:	max. R ₀ -Drifting ≤ 0,05% / Year				
Insulation R-Value:	>10M at room temperature				
Self-heating:	$\Delta t = I^2 * R * E$				
Self-heating coefficient E in K/mW	Type	in water (v=0,2 m/s)		in air (v=2m/sec)	
	0805	0,02		0,15	
	1206	0,02		0,20	
Response time in seconds	Type	in water (v=0,4m/sec)		in air (v=1m/sec)	
		t _{0,5}	t _{0,9}	t _{0,5}	t _{0,9}
	0805	0,1	0,3	2,6	7,9
	1206	0,1	0,3	3,3	9,5
Soldering connections:	Electroplated tinned wrap-around contact with diffusion barrier Solderability, see DIN IEC 68 Part 2				
Processing:	Reflow soldering (Soldering temperature/time ≤ 240°C / 8s) Flood soldering (Soldering temperature/time ≤ 260°C / 10s)				
SMD-Sizes:	The types CPT 0805 and CPT 1206 are produced acc. CECC 40401-004/DIN 45 921.				
Operating conditions:	Platinum-Temperature sensors may not be used unprotected inside moist environments or inside aggressive atmospheres. It's necessary to perform a check by the user before using inside applications.				
Packaging:	Card tape, small quantities also as bulk				
Storage:	Inside tape packaging (standard), Platinum-Temperature sensors can be stored under normal environment conditions at least 12 month.				