

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

Type: CPT

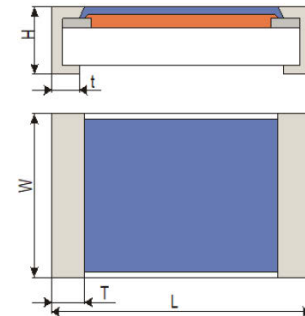
Sizes: 0805, 1206

Characteristics:

- Temperature sensors in thin film technology
- Wide area of temperature measurement from -50 to +150°C
- Standardized nominal values and tolerances
- Tolerance classes 1/3 DIN B, DIN A, DIN B (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.

Only with original packing (5.000 pieces) in the belt on roll with roll forward and roll after-run. For small quantities, this may differ.

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: 1/3 DIN B (class F0,1) DIN A (class F0,15) DIN B (class F0,3)	K- only with	P- Card tape	

Size	R-Value	Availability		
		1/3 Din B	DIN A	DIN B
0805	100	on request	on request	X
	500	on request	on request	X
	1000	on request	on request	X
1206	100	on request	on request	X
	500	on request	on request	X
	1000	on request	on request	X

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

Type: CPT
Sizes: 0805, 1206

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 1/3 DIN B (F0,1):	0 to +150°C		
	Temperature range DIN A (F0,15):	-30 to +150°C		
	Temperature range DIN B (F0,3):	-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			
Storage:	Inside tape packaging (standard), Platinum-Temperature sensors can be stored under normal environment conditions at least 12 month.			