

		Characteristic of temperature sensing elements NTC 10k B25/85=3977				NTC10k	
						VÝTISK ČÍSLO	
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Basic technical data

Sensing element	Bead thermistor NTC
Range of working temperatures	-40 to 125 °C *
Resistance at 25°C	10 kΩ
Long term stability of resistance	≤ 3%; after 1000 h at t = 85 °C
Recommended / maximal dc power drain	0,5 mW / 2mW
Tolerance field	± 0,5 °C for t = 25 °C ± 1,0 °C for t = 0 to 70 °C

* The real range of working temperatures of sensor is defined by the design and technology

Relation the resistor value on temperature

°C	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-40	334,202									
-30	177,797	189,085	201,158	214,077	227,905	242,710	258,566	275,554	293,759	313,275
-20	97,923	103,781	110,026	116,687	123,795	131,380	139,479	148,128	157,368	167,242
-10	55,805	58,944	62,280	65,827	69,599	73,612	77,883	82,430	87,271	92,428
0	32,869	34,605	36,445	38,396	40,463	42,655	44,981	47,449	50,069	52,850

°C	0	1	2	3	4	5	6	7	8	9
0	32,869	31,229	29,680	28,217	26,834	25,527	24,291	23,122	22,015	20,968
10	19,977	19,038	18,149	17,306	16,507	15,750	15,032	14,350	13,703	13,090
20	12,507	11,953	11,427	10,927	10,452	10,000	9,570	9,161	8,772	8,402
30	8,049	7,713	7,393	7,088	6,798	6,521	6,256	6,004	5,764	5,534
40	5,315	5,106	4,906	4,715	4,533	4,358	4,191	4,032	3,879	3,733
50	3,594	3,460	3,332	3,210	3,092	2,980	2,872	2,768	2,669	2,574
60	2,483	2,396	2,312	2,231	2,154	2,080	2,009	1,940	1,874	1,811
70	1,750	1,692	1,636	1,582	1,530	1,480	1,431	1,385	1,340	1,298
80	1,256	1,216	1,178	1,141	1,105	1,071	1,038	1,006	0,975	0,945
90	0,916	0,889	0,862	0,836	0,811	0,787	0,764	0,741	0,720	0,699
100	0,678	0,659	0,640	0,622	0,604	0,587	0,570	0,554	0,539	0,524
110	0,509	0,495	0,481	0,468	0,455	0,443	0,431	0,419	0,408	0,397
120	0,386	0,376	0,366	0,357	0,347	0,338				

Characteristic of the sensing element

