

NTC SMD Thermistor with Ni/Sn termination

for Automotive, Industrial and General applications

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SpiCAT



KYOCERA AVX Chip NTC Thermistors are high quality devices developed especially for surface mounting applications. They are widely used for temperature compensation, but can also achieve temperature control of printed circuits in a wide range of applications, including automotive, industrial and general purpose. Ni barrier/100% Sn plated termination for lead free soldering.

Characteristics

Case Size	1206
Operating temperature	-55°C to +150°C
Resistance	680 kOhm
Tolerance on Resistance (25°C)	$\pm 20\%$
B 25/85	4400K $\pm 3\%$
Maximum dissipation at 25°C	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)



MSL 1
Pb Free
260°C

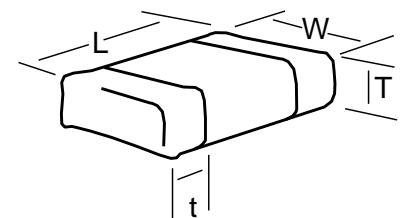


AEC-Q200
based qualification

Dimensions **WWWW**

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.2 ± 0.4	1.6 ± 0.25	1.5 max	0.2 min
	(0.126 ± 0.016)	(0.063 ± 0.01)	(0.059) max	(0.008) min



How to Order (Packaging options)

NB	20	R0	0684	M	BE
Type	Size	Material Code	Resistance (Ohm)	Tolerance	Suffix: Packaging
NB = Ni/Sn Term for lead free soldering	20 = 1206	See Datasheet	2 Sig. Digits + Number of Zeros	H = $\pm 3\%*$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	BA = Plastic tape (180mm reel, 3,000 pcs/reel) BE = Plastic tape (180mm reel, 1,500 pcs/reel) BC = Plastic tape (330mm reel, 10,000 pcs/reel) -- = Bulk (5000 pcs/bag)
				* For selected PNs	

NOTICE: Specifications are subject to change without notice. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee or responsibility of any kind, expressed or implied. Specifications are typical and may not apply to all applications.

Material Table

R0 (B25/85 = 4400K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	113.9	25.89	-7.13
-50	79.71	22.37	-6.95
-45	56.30	19.23	-6.77
-40	40.13	16.44	-6.60
-35	28.85	13.96	-6.44
-30	20.92	11.77	-6.28
-25	15.29	9.82	-6.12
-20	11.27	8.11	-5.97
-15	8.368	6.60	-5.82
-10	6.261	5.28	-5.68
-5	4.719	4.13	-5.53
0	3.583	3.13	-5.40
5	2.739	2.27	-5.26
10	2.108	1.54	-5.13
15	1.634	0.93	-5.00
20	1.274	0.42	-4.88
25	1.000	0.00	-4.75
30	0.7897	0.40	-4.64
35	0.6273	0.86	-4.52
40	0.5012	1.36	-4.41
45	0.4028	1.91	-4.30
50	0.3255	2.50	-4.19
55	0.2644	3.13	-4.09
60	0.2159	3.78	-3.98
65	0.1772	4.47	-3.89
70	0.1462	5.18	-3.79
75	0.1212	5.90	-3.70
80	0.1009	6.65	-3.60
85	0.0844	7.42	-3.52
90	0.0709	8.20	-3.43
95	0.0598	8.99	-3.35
100	0.0507	9.79	-3.26
105	0.0431	10.60	-3.19
110	0.0369	11.41	-3.11
115	0.0316	12.24	-3.03
120	0.0272	13.06	-2.96
125	0.0235	13.89	-2.89
130	0.0204	14.73	-2.82
135	0.0177	15.56	-2.76
140	0.0154	16.40	-2.69
145	0.0135	17.23	-2.63
150	0.0119	18.07	-2.57

B25/50	B25/75	B25/85	B25/100	B Tol
4326 K	4382 K	4400 K	4423 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
41,903,032	77,436,961	112,970,889
31,237,780	54,200,067	77,162,354
23,267,076	38,287,212	53,307,348
17,344,603	27,289,084	37,233,565
12,956,031	19,619,678	26,283,324
9,706,109	14,225,102	18,744,095
7,297,315	10,398,678	13,500,041
5,508,479	7,662,380	9,816,282
4,176,404	5,690,101	7,203,798
3,181,166	4,257,538	5,333,911
2,434,796	3,209,182	3,983,569
1,872,778	2,436,381	2,999,985
1,447,750	1,862,651	2,277,552
1,124,876	1,433,757	1,742,638
878,473	1,110,969	1,343,465
689,546	866,437	1,043,329
544,000	680,000	816,000
427,419	536,966	646,513
337,591	426,561	515,531
268,022	340,836	413,650
213,869	273,887	333,906
171,506	221,307	271,109
138,204	179,785	221,365
111,899	146,818	181,737
91,023	120,508	149,993
74,378	99,403	124,428
61,047	82,390	103,733
50,323	68,609	86,894
41,657	57,393	73,128
34,626	48,223	61,819
28,897	40,692	52,488
24,211	34,481	44,752
20,361	29,337	38,313
17,187	25,059	32,930
14,560	21,486	28,412
12,377	18,491	24,605
10,558	15,971	21,385
9,035.6	13,843	18,651
7,757.7	12,039	16,321
6,681.3	10,505	14,329
5,771.7	9,195.7	12,620
5,000.7	8,074.6	11,149