

NTC SMD Thermistor with Ni/Sn termination

for Automotive, Industrial and General applications

To view data online visit:

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	50 kOhm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	4000K $\pm 3\%$
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

Type

NB = Ni/Sn Term for lead free soldering

20

Size

20 = 1206

M4

Material Code

See Datasheet

0503

Resistance (Ohm)

2 Sig. Digits + Number of Zeros

J

Tolerance

H = $\pm 3\%$ *
J = $\pm 5\%$
K = $\pm 10\%$
M = $\pm 20\%$

* For selected PNs

BA

Suffix: Packaging

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)

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

M4 (B25/85 = 4000K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	98.22	23.50	-7.38
-50	68.17	20.31	-7.12
-45	47.92	17.46	-6.88
-40	34.11	14.93	-6.64
-35	24.57	12.68	-6.42
-30	17.89	10.68	-6.20
-25	13.17	8.92	-6.00
-20	9.790	7.36	-5.80
-15	7.349	5.99	-5.62
-10	5.568	4.80	-5.44
-5	4.256	3.75	-5.27
0	3.280	2.84	-5.11
5	2.549	2.07	-4.95
10	1.996	1.40	-4.80
15	1.574	0.84	-4.66
20	1.250	0.38	-4.52
25	1.000	0.00	-4.39
30	0.8049	0.36	-4.27
35	0.6519	0.78	-4.15
40	0.5311	1.24	-4.03
45	0.4352	1.74	-3.92
50	0.3586	2.27	-3.81
55	0.2970	2.84	-3.71
60	0.2472	3.44	-3.61
65	0.2068	4.06	-3.52
70	0.1738	4.70	-3.42
75	0.1468	5.36	-3.34
80	0.1245	6.04	-3.25
85	0.1060	6.73	-3.17
90	0.0906	7.44	-3.09
95	0.0778	8.16	-3.01
100	0.0670	8.89	-2.94
105	0.0579	9.62	-2.87
110	0.0503	10.36	-2.80
115	0.0438	11.11	-2.74
120	0.0382	11.86	-2.67
125	0.0335	12.62	-2.61
130	0.0294	13.37	-2.55
135	0.0259	14.13	-2.49
140	0.0229	14.89	-2.44
145	0.0203	15.65	-2.38
150	0.0181	16.41	-2.33

B25/50	B25/75	B25/85	B25/100	B Tol
3953 K	3984 K	4000 K	4010 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
3,511,143	4,910,981	6,310,819
2,545,738	3,408,255	4,270,772
1,858,040	2,396,227	2,934,413
1,365,707	1,705,590	2,045,473
1,011,166	1,228,313	1,445,461
754,212	894,510	1,034,808
566,727	658,373	750,019
428,981	489,500	550,019
327,069	367,471	407,872
251,142	278,414	305,685
194,182	212,802	231,423
151,158	164,025	176,892
118,442	127,447	136,451
93,402	99,789	106,177
74,112	78,710	83,309
59,160	62,523	65,885
47,500	50,000	52,500
38,086	40,245	42,404
30,711	32,595	34,478
24,899	26,556	28,213
20,294	21,760	23,226
16,625	17,928	19,232
13,685	14,850	16,014
11,319	12,362	13,405
9,404.8	10,341	11,278
7,848.7	8,691.7	9,534.7
6,577.9	7,338.2	8,098.5
5,535.6	6,222.5	6,909.5
4,676.9	5,298.6	5,920.4
3,966.6	4,530.1	5,093.7
3,376.6	3,888.2	4,399.9
2,884.7	3,349.8	3,815.0
2,472.9	2,896.4	3,319.9
2,127.1	2,513.2	2,899.3
1,835.5	2,188.0	2,540.5
1,588.9	1,911.2	2,233.4
1,379.6	1,674.6	1,969.6
1,201.4	1,471.8	1,742.2
1,049.2	1,297.3	1,545.5
918.8	1,146.9	1,375.0
806.7	1,016.6	1,226.5
710.2	903.6	1,097.0