

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	6800 Ohm
Tolerance on Resistance (25°C)	$\pm 20\%$
B 25/85	3480K $\pm 3\%$
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

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	J0	0682	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

J0 (B25/85 = 3480K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	51.75	20.47	-6.23
-50	37.98	17.69	-6.03
-45	28.15	15.21	-5.84
-40	21.07	13.00	-5.65
-35	15.91	11.04	-5.48
-30	12.13	9.31	-5.31
-25	9.321	7.77	-5.15
-20	7.222	6.41	-4.99
-15	5.640	5.22	-4.84
-10	4.438	4.18	-4.69
-5	3.517	3.27	-4.55
0	2.807	2.48	-4.42
5	2.255	1.80	-4.29
10	1.824	1.22	-4.17
15	1.484	0.73	-4.05
20	1.215	0.33	-3.93
25	1.000	0.00	-3.82
30	0.8278	0.32	-3.71
35	0.6889	0.68	-3.61
40	0.5763	1.08	-3.51
45	0.4845	1.51	-3.41
50	0.4092	1.98	-3.32
55	0.3472	2.47	-3.23
60	0.2960	2.99	-3.15
65	0.2533	3.53	-3.06
70	0.2177	4.09	-2.98
75	0.1879	4.67	-2.90
80	0.1628	5.26	-2.83
85	0.1415	5.87	-2.76
90	0.1235	6.48	-2.69
95	0.1081	7.11	-2.62
100	0.0950	7.74	-2.55
105	0.0837	8.38	-2.49
110	0.0740	9.03	-2.43
115	0.0656	9.68	-2.37
120	0.0584	10.33	-2.31
125	0.0521	10.99	-2.26
130	0.0466	11.65	-2.21
135	0.0417	12.31	-2.15
140	0.0375	12.97	-2.10
145	0.0338	13.63	-2.06
150	0.0305	14.29	-2.01

B25/50	B25/75	B25/85	B25/100	B Tol
3443 K	3471 K	3480 K	3492 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
209,473	351,908	494,343
160,918	258,252	355,586
124,029	191,431	258,833
95,986	143,270	190,555
74,623	108,219	141,815
58,300	82,469	106,638
45,781	63,382	80,984
36,139	49,112	62,084
28,680	38,353	48,027
22,882	30,178	37,474
18,353	23,918	29,483
14,798	19,089	23,380
11,994	15,337	18,680
9,770.3	12,402	15,034
7,998.9	10,091	12,183
6,580.8	8,260.0	9,939.1
5,440.0	6,800.0	8,160.0
4,485.4	5,629.1	6,772.8
3,716.0	4,684.7	5,653.4
3,092.8	3,918.8	4,744.9
2,585.7	3,294.4	4,003.1
2,171.1	2,782.7	3,394.3
1,830.6	2,361.3	2,891.9
1,549.8	2,012.6	2,475.3
1,317.3	1,722.7	2,128.1
1,123.9	1,480.7	1,837.4
962.5	1,277.7	1,593.0
827.2	1,106.8	1,386.4
713.4	962.4	1,211.3
617.4	839.7	1,062.1
536.0	735.3	934.6
466.8	645.9	825.1
407.7	569.3	730.9
357.2	503.3	649.4
313.9	446.3	578.8
276.5	396.9	517.4
244.3	354.0	463.7
216.4	316.6	416.8
192.2	283.9	375.6
171.1	255.2	339.3
152.6	230.0	307.3
136.5	207.7	279.0