

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	0805
Operating temperature	-55°C to +150°C
Resistance	3300 Ohm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	3480K $\pm 3\%$
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	Ni barrier/100%Sn (for Pb free soldering)



RoHS
COMPLIANT

MSL 1
Pb Free
260°C



AEC-Q200
based qualification







Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0 ± 0.3	1.25 ± 0.2	1.3 max	0.2 min
	(0.079 ± 0.012)	(0.049 ± 0.008)	(0.051) max	(0.008) min



How to Order (Packaging options)

NB  Type NB = Ni/Sn Term for lead free soldering	12  Size 12 = 0805	J0  Material Code See Datasheet	0332  Resistance (Ohm) 2 Sig. Digits + Number of Zeros	J  Tolerance H = $\pm 3\%$ * J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	BD  Suffix: Packaging BB = Cardboard tape (180mm reel, 4,000 pcs/reel) BF = Cardboard tape (180mm reel, 2,000 pcs/reel) BD = Cardboard tape (330mm reel, 10,000 pcs/reel) -- = Bulk (5000 pcs/bag)
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* 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)
127,273	170,779	214,285
96,892	125,328	153,765
74,126	92,900	111,675
57,011	69,528	82,046
44,092	52,518	60,944
34,296	40,022	45,748
26,831	30,759	34,687
21,113	23,834	26,554
16,710	18,613	20,515
13,301	14,645	15,989
10,648	11,607	12,567
8,570.9	9,263.7	9,956.4
6,936.9	7,442.9	7,949.0
5,644.2	6,018.7	6,393.1
4,616.4	4,897.2	5,178.0
3,794.9	4,008.5	4,222.1
3,135.0	3,300.0	3,465.0
2,586.5	2,731.8	2,877.0
2,144.4	2,273.5	2,402.6
1,786.2	1,901.8	2,017.4
1,494.6	1,598.8	1,702.9
1,256.2	1,350.4	1,444.7
1,060.3	1,145.9	1,231.6
898.6	976.7	1,054.8
764.7	836.0	907.4
653.2	718.6	783.9
560.1	620.1	680.0
482.0	537.1	592.3
416.3	467.0	517.8
360.7	407.5	454.3
313.6	356.8	400.0
273.5	313.5	353.4
239.3	276.3	313.3
210.0	244.3	278.5
184.8	216.6	248.4
163.1	192.6	222.2
144.3	171.8	199.3
128.1	153.6	179.2
113.9	137.8	161.6
101.6	123.8	146.1
90.8	111.6	132.4
81.4	100.8	120.3