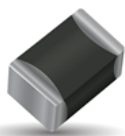


NTC SMD Thermistor with Ni/Sn termination

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	0805
Operating temperature	-55°C to +150°C
Resistance	50 kOhm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	4080K $\pm 3\%$
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)



MSL 1
Pb Free
260°C

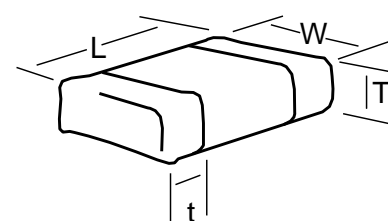


AEC-Q200
based qualification







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	N0  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 = $\pm 20\%$	BB  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

N0 (B25/85 = 4080K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	110.1	24.01	-7.50
-50	75.89	20.74	-7.25
-45	52.97	17.83	-7.01
-40	37.42	15.25	-6.78
-35	26.75	12.95	-6.56
-30	19.33	10.91	-6.35
-25	14.11	9.11	-6.14
-20	10.41	7.52	-5.95
-15	7.758	6.12	-5.76
-10	5.834	4.90	-5.58
-5	4.426	3.83	-5.41
0	3.387	2.91	-5.24
5	2.614	2.11	-5.08
10	2.033	1.43	-4.93
15	1.593	0.86	-4.78
20	1.258	0.39	-4.64
25	1.000	0.00	-4.51
30	0.8004	0.37	-4.37
35	0.6449	0.80	-4.25
40	0.5228	1.26	-4.13
45	0.4264	1.77	-4.01
50	0.3497	2.32	-3.90
55	0.2885	2.90	-3.79
60	0.2392	3.51	-3.68
65	0.1994	4.14	-3.58
70	0.1671	4.80	-3.49
75	0.1406	5.48	-3.39
80	0.1189	6.17	-3.30
85	0.1010	6.88	-3.22
90	0.0862	7.60	-3.13
95	0.0738	8.33	-3.05
100	0.0635	9.08	-2.97
105	0.0548	9.83	-2.90
110	0.0475	10.58	-2.83
115	0.0413	11.35	-2.76
120	0.0360	12.11	-2.69
125	0.0315	12.89	-2.62
130	0.0277	13.66	-2.56
135	0.0244	14.43	-2.50
140	0.0216	15.21	-2.44
145	0.0191	15.98	-2.38
150	0.0170	16.76	-2.33

B25/50	B25/75	B25/85	B25/100	B Tol
4049 K	4072 K	4080 K	4090 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
3,908,095	5,504,867	7,101,639
2,817,746	3,794,468	4,771,190
2,043,865	2,648,623	3,253,380
1,492,347	1,871,202	2,250,057
1,097,267	1,337,306	1,577,345
812,588	966,362	1,120,137
606,160	705,746	805,332
455,481	520,674	585,867
344,749	387,892	431,036
262,813	291,683	320,553
201,769	221,311	240,853
155,978	169,367	182,756
121,398	130,689	139,980
95,109	101,646	108,183
74,994	79,662	84,330
59,503	62,890	66,277
47,500	50,000	52,500
37,871	40,021	42,171
30,374	32,243	34,111
24,501	26,139	27,776
19,874	21,318	22,762
16,207	17,487	18,767
13,285	14,424	15,564
10,944	11,962	12,980
9,059.7	9,971.3	10,883
7,534.7	8,353.3	9,171.8
6,294.8	7,031.3	7,767.9
5,281.8	5,945.9	6,610.0
4,450.6	5,050.4	5,650.3
3,765.4	4,308.2	4,851.1
3,198.3	3,690.3	4,182.3
2,726.9	3,173.6	3,620.3
2,333.6	2,739.8	3,146.0
2,004.1	2,374.1	2,744.0
1,727.0	2,064.5	2,402.0
1,493.2	1,801.6	2,109.9
1,295.2	1,577.3	1,859.5
1,127.0	1,385.5	1,644.0
983.6	1,220.8	1,458.0
860.9	1,078.9	1,296.9
755.6	956.3	1,156.9
665.1	850.0	1,034.9