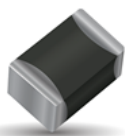


NTC SMD Thermistor with Ni/Sn termination

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	82 kOhm
Tolerance on Resistance (25°C)	$\pm 3\%$
B 25/85	4080K $\pm 3\%$
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	N0	0823	H	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

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)
6,589,835	9,027,982	11,466,129
4,745,562	6,222,928	7,700,294
3,438,814	4,343,741	5,248,668
2,508,824	3,068,771	3,628,717
1,843,381	2,193,181	2,542,982
1,364,341	1,584,834	1,805,327
1,017,251	1,157,424	1,297,596
764,068	853,905	943,743
578,111	636,143	694,176
440,581	478,361	516,141
338,160	362,950	387,740
261,359	277,762	294,164
203,379	214,330	225,281
159,313	166,700	174,087
125,602	130,645	135,688
99,648	103,140	106,632
79,540	82,000	84,460
63,422	65,635	67,848
50,871	52,878	54,885
41,039	42,867	44,695
33,292	34,961	36,630
27,152	28,678	30,204
22,260	23,656	25,052
18,341	19,618	20,895
15,185	16,353	17,521
12,631	13,699	14,768
10,554	11,531	12,509
8,857.2	9,751.3	10,645
7,464.6	8,282.7	9,100.9
6,316.6	7,065.5	7,814.4
5,366.2	6,052.1	6,738.0
4,576.2	5,204.7	5,833.3
3,916.9	4,493.3	5,069.6
3,364.5	3,893.4	4,422.3
2,900.0	3,385.8	3,871.6
2,508.0	2,954.5	3,401.1
2,175.9	2,586.8	2,997.8
1,893.7	2,272.2	2,650.7
1,653.1	2,002.1	2,351.1
1,447.2	1,769.4	2,091.6
1,270.6	1,568.3	1,866.0
1,118.6	1,394.0	1,669.4