

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	820 kOhm
Tolerance on Resistance (25°C)	$\pm 20\%$
B 25/85	4400K $\pm 3\%$
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

R0

Material Code

See Datasheet

0824

Resistance (Ohm)

2 Sig. Digits + Number of Zeros

M

Tolerance

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

* For selected PNs

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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

R0 (B25/85 = 4400K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	113.9	25.89	-7.13
-50	79.71	22.37	-6.95
-45	56.30	19.23	-6.77
-40	40.13	16.44	-6.60
-35	28.85	13.96	-6.44
-30	20.92	11.77	-6.28
-25	15.29	9.82	-6.12
-20	11.27	8.11	-5.97
-15	8.368	6.60	-5.82
-10	6.261	5.28	-5.68
-5	4.719	4.13	-5.53
0	3.583	3.13	-5.40
5	2.739	2.27	-5.26
10	2.108	1.54	-5.13
15	1.634	0.93	-5.00
20	1.274	0.42	-4.88
25	1.000	0.00	-4.75
30	0.7897	0.40	-4.64
35	0.6273	0.86	-4.52
40	0.5012	1.36	-4.41
45	0.4028	1.91	-4.30
50	0.3255	2.50	-4.19
55	0.2644	3.13	-4.09
60	0.2159	3.78	-3.98
65	0.1772	4.47	-3.89
70	0.1462	5.18	-3.79
75	0.1212	5.90	-3.70
80	0.1009	6.65	-3.60
85	0.0844	7.42	-3.52
90	0.0709	8.20	-3.43
95	0.0598	8.99	-3.35
100	0.0507	9.79	-3.26
105	0.0431	10.60	-3.19
110	0.0369	11.41	-3.11
115	0.0316	12.24	-3.03
120	0.0272	13.06	-2.96
125	0.0235	13.89	-2.89
130	0.0204	14.73	-2.82
135	0.0177	15.56	-2.76
140	0.0154	16.40	-2.69
145	0.0135	17.23	-2.63
150	0.0119	18.07	-2.57

B25/50	B25/75	B25/85	B25/100	B Tol
4326 K	4382 K	4400 K	4423 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
50,530,127	93,379,865	136,229,602
37,669,087	65,358,904	93,048,721
28,057,356	46,169,873	64,282,391
20,915,551	32,907,425	44,899,299
15,623,450	23,659,023	31,694,596
11,704,426	17,153,799	22,603,173
8,799,704	12,539,583	16,279,462
6,642,577	9,239,929	11,837,281
5,036,252	6,861,592	8,686,933
3,836,112	5,134,090	6,432,069
2,936,077	3,869,896	4,803,715
2,258,350	2,937,989	3,617,628
1,745,816	2,246,138	2,746,460
1,356,468	1,728,942	2,101,416
1,059,335	1,339,698	1,620,061
831,511	1,044,821	1,258,132
656,000	820,000	984,000
515,417	647,518	779,618
407,096	514,383	621,670
323,203	411,008	498,814
257,900	330,276	402,652
206,816	266,871	326,925
166,658	216,799	266,941
134,937	177,046	219,154
109,763	145,319	180,874
89,692	119,869	150,046
73,616	99,353	125,089
60,683	82,734	104,784
50,234	69,209	88,184
41,755	58,151	74,547
34,847	49,070	63,294
29,195	41,581	53,966
24,553	35,377	46,201
20,725	30,218	39,710
17,557	25,910	34,262
14,926	22,298	29,671
12,731	19,259	25,787
10,896	16,693	22,490
9,354.9	14,518	19,681
8,056.9	12,668	17,279
6,960.0	11,089	15,218
6,030.2	9,737.1	13,444