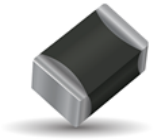
NB20P00184HBC

(1206, 180 kOhm ±3%, 4220K, Ni/100% Sn)

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	1206
Operating temperature	-55°C to +150°C
Resistance	180 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	4220K±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)

RoHS COMPLIANT

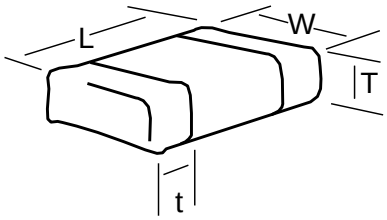
MSL 1
Pb Free 260°C

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	20	P0	0184	H	BC
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 = ±3%* J = ±5% K = ±10% M = ±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 beleived 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

P0 (B25/85 = 4220K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4181 K	4211 K	4220 K	4232 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	121.4	24.83	-7.56	15,768,106	21,848,653	27,929,200
-50	83.35	21.45	-7.32	11,334,002	15,002,459	18,670,916
-45	57.92	18.44	-7.09	8,190,415	10,426,319	12,662,223
-40	40.72	15.77	-6.87	5,954,458	7,330,348	8,706,239
-35	28.95	13.39	-6.66	4,356,985	5,211,318	6,065,652
-30	20.80	11.29	-6.45	3,209,665	3,744,671	4,279,677
-25	15.10	9.42	-6.26	2,380,857	2,718,598	3,056,339
-20	11.07	7.78	-6.07	1,778,442	1,993,297	2,208,152
-15	8.197	6.33	-5.89	1,337,775	1,475,476	1,613,177
-10	6.123	5.07	-5.71	1,013,321	1,102,226	1,191,130
-5	4.615	3.96	-5.54	772,858	830,688	888,518
0	3.508	3.00	-5.38	593,468	631,382	669,296
5	2.688	2.18	-5.22	458,763	483,834	508,906
10	2.076	1.48	-5.07	356,954	373,697	390,441
15	1.616	0.89	-4.92	279,517	290,828	302,140
20	1.267	0.40	-4.78	220,246	227,996	235,745
25	1.000	0.00	-4.64	174,600	180,000	185,400
30	0.7949	0.38	-4.51	138,233	143,075	147,918
35	0.6359	0.82	-4.38	110,095	114,471	118,846
40	0.5120	1.31	-4.26	88,194	92,164	96,134
45	0.4148	1.84	-4.14	71,046	74,656	78,266
50	0.3379	2.40	-4.03	57,544	60,830	64,115
55	0.2769	3.00	-3.92	46,853	49,844	52,835
60	0.2281	3.63	-3.81	38,343	41,066	43,788
65	0.1890	4.28	-3.71	31,534	34,012	36,489
70	0.1573	4.96	-3.61	26,058	28,312	30,567
75	0.1316	5.66	-3.52	21,632	23,684	25,735
80	0.1106	6.38	-3.42	18,038	19,905	21,773
85	0.0934	7.11	-3.34	15,106	16,806	18,506
90	0.0792	7.86	-3.25	12,704	14,252	15,800
95	0.0674	8.62	-3.17	10,727	12,138	13,548
100	0.0577	9.39	-3.09	9,093.5	10,379	11,665
105	0.0495	10.16	-3.01	7,737.9	8,910.9	10,084
110	0.0427	10.95	-2.93	6,608.5	7,679.6	8,750.7
115	0.0369	11.74	-2.86	5,664.0	6,643.0	7,621.9
120	0.0320	12.53	-2.79	4,871.2	5,766.8	6,662.5
125	0.0279	13.33	-2.72	4,203.4	5,023.6	5,843.8
130	0.0244	14.13	-2.66	3,638.8	4,390.8	5,142.8
135	0.0214	14.93	-2.59	3,159.9	3,850.1	4,540.3
140	0.0188	15.73	-2.53	2,752.3	3,386.6	4,020.9
145	0.0166	16.53	-2.47	2,404.3	2,987.9	3,571.4
150	0.0147	17.33	-2.42	2,106.3	2,643.8	3,181.4