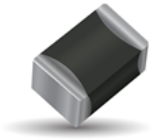
NB20P00184KBA

(1206, 180 kOhm ±10%, 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)	±10%
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

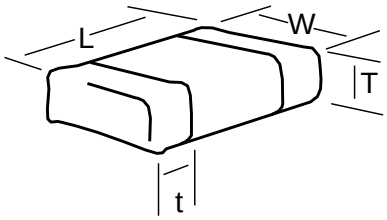
MSL 1
Pb Free 260°C

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	K	BA
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% * For selected PNs	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 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	14,238,700	21,848,653	29,458,606
-50	83.35	21.45	-7.32	10,283,830	15,002,459	19,721,088
-45	57.92	18.44	-7.09	7,460,573	10,426,319	13,392,065
-40	40.72	15.77	-6.87	5,441,334	7,330,348	9,219,363
-35	28.95	13.39	-6.66	3,992,193	5,211,318	6,430,444
-30	20.80	11.29	-6.45	2,947,538	3,744,671	4,541,804
-25	15.10	9.42	-6.26	2,190,555	2,718,598	3,246,641
-20	11.07	7.78	-6.07	1,638,911	1,993,297	2,347,683
-15	8.197	6.33	-5.89	1,234,492	1,475,476	1,716,461
-10	6.123	5.07	-5.71	936,166	1,102,226	1,268,285
-5	4.615	3.96	-5.54	714,710	830,688	946,666
0	3.508	3.00	-5.38	549,272	631,382	713,492
5	2.688	2.18	-5.22	424,894	483,834	542,774
10	2.076	1.48	-5.07	330,795	373,697	416,599
15	1.616	0.89	-4.92	259,159	290,828	322,498
20	1.267	0.40	-4.78	204,286	227,996	251,705
25	1.000	0.00	-4.64	162,000	180,000	198,000
30	0.7949	0.38	-4.51	128,217	143,075	157,933
35	0.6359	0.82	-4.38	102,082	114,471	126,859
40	0.5120	1.31	-4.26	81,742	92,164	102,586
45	0.4148	1.84	-4.14	65,820	74,656	83,492
50	0.3379	2.40	-4.03	53,286	60,830	68,373
55	0.2769	3.00	-3.92	43,364	49,844	56,324
60	0.2281	3.63	-3.81	35,469	41,066	46,663
65	0.1890	4.28	-3.71	29,153	34,012	38,870
70	0.1573	4.96	-3.61	24,076	28,312	32,549
75	0.1316	5.66	-3.52	19,974	23,684	27,393
80	0.1106	6.38	-3.42	16,645	19,905	23,166
85	0.0934	7.11	-3.34	13,930	16,806	19,682
90	0.0792	7.86	-3.25	11,707	14,252	16,798
95	0.0674	8.62	-3.17	9,877.7	12,138	14,397
100	0.0577	9.39	-3.09	8,367.0	10,379	12,392
105	0.0495	10.16	-3.01	7,114.1	8,910.9	10,708
110	0.0427	10.95	-2.93	6,070.9	7,679.6	9,288.3
115	0.0369	11.74	-2.86	5,199.0	6,643.0	8,086.9
120	0.0320	12.53	-2.79	4,467.5	5,766.8	7,066.1
125	0.0279	13.33	-2.72	3,851.7	5,023.6	6,195.5
130	0.0244	14.13	-2.66	3,331.4	4,390.8	5,450.1
135	0.0214	14.93	-2.59	2,890.4	3,850.1	4,809.8
140	0.0188	15.73	-2.53	2,515.2	3,386.6	4,257.9
145	0.0166	16.53	-2.47	2,195.2	2,987.9	3,780.6
150	0.0147	17.33	-2.42	1,921.2	2,643.8	3,366.4