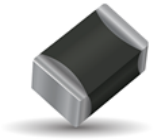
NB20L00183KBA

(1206, 18 kOhm ±10%, 3790K, 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	18 kOhm
Tolerance on Resistance (25°C)	±10%
B 25/85	3790K±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

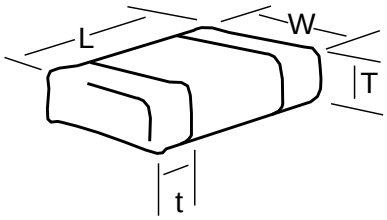
MSL 1
Pb Free
260°C

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	L0	0183	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

L0 (B25/85 = 3790K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3765 K	3784 K	3790 K	3798 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	82.54	22.30	-7.12	1,005,873	1,485,774	1,965,675
-50	58.03	19.27	-6.87	738,809	1,044,491	1,350,172
-45	41.31	16.57	-6.63	545,986	743,496	941,006
-40	29.75	14.16	-6.40	406,170	535,581	664,991
-35	21.68	12.03	-6.18	304,257	390,217	476,177
-30	15.97	10.14	-5.98	229,533	287,407	345,282
-25	11.88	8.46	-5.78	174,399	213,890	253,380
-20	8.931	6.99	-5.59	133,454	160,761	188,068
-15	6.777	5.69	-5.40	102,843	121,978	141,113
-10	5.188	4.55	-5.23	79,804	93,392	106,980
-5	4.007	3.56	-5.06	62,348	72,127	81,906
0	3.120	2.70	-4.90	49,035	56,167	63,300
5	2.449	1.96	-4.75	38,815	44,087	49,360
10	1.937	1.33	-4.60	30,919	34,869	38,820
15	1.543	0.80	-4.46	24,780	27,780	30,780
20	1.238	0.36	-4.33	19,978	22,287	24,596
25	1.000	0.00	-4.20	16,200	18,000	19,800
30	0.8128	0.35	-4.07	13,118	14,631	16,145
35	0.6648	0.74	-3.95	10,681	11,966	13,251
40	0.5469	1.17	-3.84	8,744.6	9,844.7	10,945
45	0.4525	1.65	-3.73	7,196.5	8,145.3	9,094.1
50	0.3764	2.16	-3.62	5,952.3	6,776.0	7,599.8
55	0.3148	2.69	-3.52	4,947.2	5,666.6	6,385.9
60	0.2646	3.26	-3.42	4,131.1	4,762.6	5,394.1
65	0.2235	3.85	-3.33	3,465.3	4,022.3	4,579.3
70	0.1896	4.46	-3.24	2,919.4	3,412.8	3,906.3
75	0.1616	5.09	-3.15	2,469.9	2,908.7	3,347.5
80	0.1383	5.73	-3.07	2,098.1	2,489.8	2,881.4
85	0.1189	6.39	-2.98	1,789.3	2,140.0	2,490.8
90	0.1026	7.06	-2.91	1,531.7	1,846.8	2,161.8
95	0.0889	7.74	-2.83	1,316.0	1,599.8	1,883.6
100	0.0773	8.43	-2.76	1,134.7	1,391.1	1,647.4
105	0.0674	9.13	-2.69	981.7	1,213.9	1,446.0
110	0.0590	9.83	-2.62	852.1	1,062.9	1,273.7
115	0.0519	10.54	-2.56	742.0	933.8	1,125.6
120	0.0457	11.25	-2.49	648.1	823.0	997.9
125	0.0404	11.97	-2.43	567.8	727.6	887.5
130	0.0358	12.69	-2.37	498.8	645.2	791.6
135	0.0319	13.41	-2.32	439.5	573.8	708.1
140	0.0284	14.13	-2.26	388.3	511.7	635.2
145	0.0254	14.85	-2.21	343.9	457.6	571.3
150	0.0228	15.57	-2.16	305.3	410.2	515.1